E

Distr.
LIMITED

E/CN.14/CAS.10/10
14 June 1978

ENGLISH
Original : FRENCH

UNITED NATIONS
ECONOMIC AND SOCIAL COUNCIL

ECONOMIC COMMISSION FOR AFRICA

Tenth session of the Conference
of African Statisticians

Addis Ababa, 17-22 October 1977

PRICE MOVEMENTS BY KIND OF ECONOMIC ACTIVITY IN AFRICA (1960 - 1975)

CONTENTS

Paragraphs

INTRODUCTION .... 1 - 10
A. Scope of the study .... 1 - 3
B. Area covered by the study .... 4 - 6
C. Brief outline of the study .... 7 - 10

PART ONE - ANALYSIS OF GDP PRICES BY KIND OF ECONOMIC ACTIVITY ..... 11 - 94

A. Introduction ....
  1. Systems of price evaluation .... 12 - 13
  2. Classification of the principal industries and economic sectors .... 14 - 18

B. Problems of measurement of the implicit price deflator indices by industry and economic sector 19
  1. Definition of implicit price deflator indices ....
  2. Methodology of price indices and quanta in some industries and economic sectors .... 25 - 36

C. Movement of implicit price deflator indices by industry and economic sector .... 37 - 94
  1. Movement of implicit price deflator indices by industry .... 37 - 81
  2. Movement of implicit price deflator indices in the monetary and non-monetary GDP .... 82 - 94

BEST COPY AVAILABLE

CONTENTS (Cont'd)

Paragraphs

PART II - EMPIRICAL RELATIONS BETWEEN IMPLICIT AND ANALYTIC PRICE PRICE INDICES FOR SOME AFRICAN COUNTRIES .... 95 -

A. Introduction .... 95 - 98

B. Implicit price deflator indices of GDP, consumer and wholesale prices .... 99 - 102

C. Implicit GDP price deflator indices by kind of economic activity .... 103 - 151

1. Implicit agricultural price deflator index for agricultural export prices and food consumer prices ..... 108 - 113
2. Implicit price deflator index and export prices of mining products .... 114 - 116
3. Implicit price deflator index for electricity, gas and water, and consumer prices of fuel and lighting .... 117 - 119
4. Implicit price deflator index for manufacturing, consumer prices of food products and clothing, wholesale prices and import prices .... 120 - 128
5. Implicit price deflator index for construction, wages obtaining in the construction industry and prices of building materials .... 129 - 135
6. Implicit price deflator index for services and consumer prices .... 136 - 151

D. Implicit price deflator index for GDP by final use of goods and services .... 152 - 158

1. Implicit price deflator indices for final consumption expenditure and gross capital formation, and consumer prices .... 155 - 156
2. Implicit price deflator indices for exports and imports of goods and services and unit values of external trade trade .... 157 - 158

E General observations on the implicit deflator indices ...... 159 - 166

1. Differences between implicit deflator and analytic price indices .... 159 - 162
2. Deflator indices used by ECA .... 163 - 166

PART III - MOVEMENT OF SOME ANALYTIC PRICE INDICES AND WAGE INDICES IN AFRICA .... 167 -

A. Introduction: over-all structure of the prices and wages pattern .... 167 - 172

B. Consumer prices in African countries .... 173 - 210

1. Brief description of the consumer price indices .... 173 - 182
2. Consumer price movements throughout the world .... 183 - 184
3. Consumer price movements in Africa .... 185 - 210

CONTENTS (Cont'd)

Paragraphs

C. Wholesale or producer prices .... 211 - 245

1. Brief description of the wholesale or producer price indices .... 211 - 225
2. Wholesale price movements throughout the world .... 226 - 227
3. Wholesale price movements in Africa .... 228 - 245

D. Average wages in African countries .... 246 - 267

1. Brief description of the wages series ....
2. Real wage trends in African countries .... 254 - 264
3. Wages and consumer prices in construction .... 265 - 267

PART IV - MOVEMENTS OF INTERNATIONAL AND DOMESTIC PRICES IN AFRICAN COUNTRIES .... 268 - 307

A. Commodity price movements .... 270 - 307

1. General developments .... 270 - 273
2. Countries exporting agricultural commodities .... 274 - 291
3. Countries exporting mineral products .... 292 - 307

B. Adjustment problems following the fluctuations in world prices .... 309 - 319

1. General problems .... 309 -312
2. Adjustment in the oil-exporting countries .... 313 - 315
3. Adjustment in the oil-importing countries .... 316 - 319

CONCLUSION .... 320 - 322

ANNEXES

I. Implicit GDP price deflator indices for some African countries
II. Empirical relations between implicit and analytic price indices for some African countries
III. Consumer prices (1970 = 100)
IV. Wholesale or producer prices (1970 = 100)
V. Average wages (national currencies)
VI. Unit values of external trade (1970 = 100)

PRICE MOVEMENTS BY KIND OF ECONOMIC ACTIVITY IN AFRICA (1960 - 1975)

INTRODUCTION

A. SCOPE OF THE STUDY

1. Stricto Sensu, price movements by kind of economic activity call for an analysis of national accounts data on the gross domestic product[1] by industry and economic sector at current and constant prices, on the basis of which it is possible to obtain what are known as implicit sectoral price deflator indices for the countries concerned, totalling 14 (Tunisia, Libya, Egypt, Sierra Leone, Liberia, Ghana, Nigeria, Zaire, Botswana, Zambia, Uganda, Tanzania, Kenya and Ethiopia),[2] within the framework of our study.

2. Lato Sensu, the analysis should cover all African countries, which means that an examination should be conducted for the above group of countries of the empirical relations which may exist between this implicit price deflator indices and other analytical price indicators available in order to be able, on the basis of the latter, to determine the movement of prices of goods and services produced in the various industries and economic sectors and transpose them to the other African countries.

3. The second approach appears more useful. While the data on implicit price deflator indices relate to 14 African countries which accounted for 55 per cent of the GDP of developing Africa in 1970, in 1974, these data covered only nine countries which accounted for only 18 per cent! an absurdly low percentage which makes it necessary to seek means of adjustment (deflation) for the majority of countries, failing which the sectoral growth rates would run the risk of serious distortion, particularly for the current inflationary period.

B. AREA COVERED BY THE STUDY

4. The area covered by this study is vast and purely experimental. It covers an area which is still largely unexplored in Africa, imposing limitations on the content

5. The first limitation concerns the field of investigation: only a critical introductory analysis of the statistical data, plus brief methodological descriptions, will be presented. It will suffice to identify trends rather than explanations specific to each country or exhaustive methodological surveys.

6. The second limitation relates to the field of experimentation: only a few price comparisons will be undertaken, to the exclusion of other variables which would concern the relations between inflation and economic development in Africa (for example, money and exchange, real product per capita, external and budgetary deficit, savings and investment, income distribution, etc.). This field merits a document to itself and in view of its magnitude it would not be without interest to undertake it later.

---

[1] The gross domestic product is represented by its abbreviation GDP in the remainder of this document.

[2] See table 1.

C. BRIEF OUTLINE OF THE STUDY

7. The first part of this study deals with the movement of implicit GDP prices by kind of economic activity in 13 African countries (excluding Botswana). A brief methodology of the national accounts estimates in constant prices will be presented for a few economic sectors, and then the movement of the implicit price deflator index by industry and economic sector will be examined.

8. The second part of this study consists of an empirical analysis between the implicit sectoral price deflator indices and certain analytical price indices for the 13 countries concerned with a view to deriving a practical methodology for the deflation of the current national accounts series by ECA.

9. The third part contains a few brief methodological notes as well as a brief analysis of the movement of prices on the basis of statistics on consumer and wholesale prices, on wages and unit values in external trade. The movement of these prices largely determines the variations in the implicit sectoral price deflator index and as a result cannot be excluded from the scope of this study.

10. At the end of this document are annexes containing the detailed basic data.

Table 1: National accounts data at constant prices available in Africa

Regions	Period covered	GDP by type of economic activity	GDP by final use
North Africa			
Tunisia	60 - 74	X	X
Libya	60 - 70	X	X
Egypt	64 - 73	X	X
(Sudan)	(60 - 69)	(X)	-
Sub-total		3	3
West Africa			
Senegal	60 - 75	(X)	(X)
(Mali)	(69 - 73)	(X)	(X)
Ivory Coast	(60 - 74)	(X) 1/	
Sierra Leone	63 - 73	X	-
Liberia	64 - 73	X	X
Ghana	60 - 74	X 2/	X
Nigeria	60 - 73	X	-
Sub-total		4	3
Central Africa			
(Chad)	(68, 70)	(X)	(X)
Zaire	68 - 74	X	X
Rwanda	(67,68)	(X)	-
Sub-total		1	1
Eastern Africa			
Botswana	67-68, 71	X	-
Zambia	65 - 76	X	X
Malawi	64 - 72	-	X
(Mauritius)	(60 - 66)	-	(X)
Tanzania	64 - 74	X	-
Uganda	60 - 71	X	-
Kenya	64 - 74	X	X
Ethiopia	61 - 74	X	-
Sub-total		6	3
Other African countries			
Southern Rhodesia	65 - 74	-	X
South Africa	60 - 75	-	X
Sub-total		-	2
TOTAL		14	12

Source: ECA, on the basis of national publications and United Nations national accounts questionnaires.

Note: In this study no account has been taken of the countries shown in parenthesis.

1/ 1973 - 1974.
2/ 1968 - 1974.

PART ONE. ANALYSIS OF GDP PRICES BY KIND OF ECONOMIC ACTIVITY

A. INTRODUCTION

11. Analysis of GDP prices by kind of economic activity requires a recapitulation of simple concepts on the system of price evaluation using the system of national accounts (SNA).[1] In addition, the variation in the implicit sectoral price deflator index is dependent on the system of classification by industries and economic sector which is used.

1. Systems of price evaluation

(a) The sequence of values under SNA

12. The new SNA defines a sequence of values, of which it is desirable to recall the most important:

(i) Approximate factor values. In the case of the gross output of commodities, industries, etc. producers' values less indirect taxes, net, in respect of those commodities, industries, etc.

(ii) True basic values. Producers' values of the gross output of commodities, industries, etc., less the relevant commodity taxes, net, and less the direct and indirect intermediate inputs.

(iii) Approximate basic values. Producers' values, that is the value on the market at the establishments of the producer, of the gross output of commodities, industries, etc., less the commodity taxes, net, in respect of the gross output.

(iv) Producers' values. This is the value in the market of the gross output of commodities from industries, etc. at the establishment of the producers.

(v) Purchasers' values. This is cost of goods and services in the market to the point of delivery to the purchaser. It is equal to the producers' values plus the trade and transport margins appropriate to the purchaser in question.

(b) Characteristics of the price evaluation methods

13. Two principal types of evaluation for which analytic price indices are desirable emerge from this sequence of values:

- The analytic price indices based on the market value. They are used each time the market conditions (supply and demand, elasticity, seasonal fluctuations, inflationary tendencies, etc.) are analysed.

- The analytic price indices based on the approximate basic value. They are used to analyse the relative productivity in the various industries and the use of physical resources by eliminating the intervention of the State in the price relations through indirect taxation and subsidies.

These indices present practical difficulties in application and, since they are available only to a very slight extent in African countries, they will not be analysed.

---

[1] United Nations System of National Accounts, series F No.2 Rev.3.

2. Classification of the principal industries and economic sectors

14. It is important for many purposes to classify the various economic activities into a number of categories. However, there is no single classification which suits all objectives. We will distinguish between classification by sector and by industry.

a. Classification of the principal economic sectors

15. The most widely adopted classification[1] is the three-sector classification: Agriculture, Industry, Services. However, this classification is fairly broad and analysing it would not provide meaningful results. Thus for example, the movement of prices in mining has undergone substantial fluctuations, particularly during the present decade (oil, phosphate, copper, etc.) and differs markedly from the price movements in the other industries (manufacturing, electricity, gas and water, construction).

16. Dividing the sectors between physical production (i.e., production from agriculture and industry) and services is too general and the heterogeneous activities which these two groups encompass produce even less meaningful results.

17. The significance of non-monetary activities in total African output, on the other hand, makes it important to take account of the classification between monetary and non-monetary production and the analysis of the movement of prices in these two sectors will be dealt with in a special section.

b. Classification of the principal industries

18. Table 9 of SNA on GDP by kind of economic activity at constant prices makes it possible to derive the implicit prices by means of a comparison with table 1 of SNA.[2] However, the classification used is fairly disaggregated for the requirements of comparison with the preceding decade. Accordingly, we carried out the following regrouping:

(i) We deleted the imputed banking service charge (a fictitious division treated as intermediate consumption in the new SNA) from the output of the industry: finance, insurance, real estate and business services.

(ii) The public administration division was not disaggregated and it is also necessary to point out the fundamental differences between the two SNAs[3] as regards the field covered.

(iii) Lastly, we regrouped under the term "Other services" the following divisions:

- Community, social and personal services,
- Private non-profit services to households,
- Domestic services of households.

---

[1] Including the classification of the data used by ECA.

[2] Division of the current values of each industry by the corresponding values at constant prices.

[3] See questionnaire on national accounts, 1970 issue, ST/STAT/38 of 4 March 1969.

This grouping is rather incongruous and differs in the classifications used by the countries; thus aggregation does not appear to distort the conclusions in this field.

B. PROBLEMS OF MEASUREMENT OF THE IMPLICIT PRICE DEFLATOR INDICES BY INDUSTRY AND ECONOMIC SECTOR

19. It is necessary first to define implicit price deflator indices, and then to review the conventions which make it possible to obtain these implicit price deflator indices, particularly by using the methodology of national accounts estimates at constant prices for a few industries and economic sectors. Finally we will tackle the system for evaluating non-monetary production.

1. Definition of implicit price deflator indices[1]

20. The flows which appear in the central framework of the national accounts represent economic transactions measured in monetary terms. The use of the monetary unit as the reference standard undoubtedly makes it possible to aggregate elementary operations which relate to heterogeneous subjects but it contains the risk of concealing certain important economic phenomena. If one considers a transaction bearing on an item, the monetary value of this transaction is a synthesis of two distinct factors: the number of physical units of the item exchanged during the transaction, and the price of each physical unit of the item, i.e., the value for which a unit of the same item would be exchanged. This is what is usually summed up in the equation: "value = quantity x price".

21. Assuming that one observes over time two exactly similar transactions, by means of the item on which they bear and by means of the units between which they take place, the difference in possible value which one records may result from two phenomena: the variation in the quantity exchanged and the variation in the price applied.

22. The example just used is located at the micro-economic level. It would therefore be dangerous to transpose it as much into the national accounts which mark out micro-economic magnitudes. Nevertheless, the convenience in economic analysis of this division of a variation in value into two factors, the variation in physical quantity and the variation in price, prompt one to endeavour to reconstitute it by analogy at the micro-economic level. This leads to the two complementary concepts in the synthesis: the variation in a set of prices, more simply termed price variation; and the volume, the variation in which results from the aggregation of the variations in the physical quantities on which the transactions regrouped in each national accounts operation have borne.

23. One arrives at the notion of values in constant prices by maintaining the prices artificially at the mean level they had reached during a given year - called "base year" - and by measuring the variation in value due for each micro-economic magnitude to variation in volume alone: In constant-price accounts, the volume is identified at the constant-price value, i.e., we have the relation:

Value = (Volume) x (variation in prices between the base year and the year in question). Implicit price deflator indices are prices which are obtained by dividing the current values by the values at constant prices, or:

$$\frac{\text{Value}}{\text{Volume}} = \text{implicit price deflator indices}$$

---

[1] See for example the extended system of national accounts, méthodes INSEE France.

24. However, the practical realization of complete accounts at constant prices runs up against many difficulties. It will be necessary in the first place to define the price of all the operations by making use of simple conventions (which has not yet been done exhaustively under SNA); it would then be necessary to prepare statistical indicators sufficiently precise to measure in fair conditions the price variations thus defined. We shall see that this is not an easy matter. Lastly it is often difficult to distinguish price variations from variations in volume, particularly in the services sector. These obstacles, both theoretical and practical, mean that implicit price deflator indices run the risk of having no precise economic meaning.

2. Methodology of price indices and quanta in some industries and economic sectors

25. The difficulty of separating the elements of price and quantity is a major problem. Furthermore, in national accounts the price indices are sometimes obtained by "derivation" from the direct evaluations at constant prices. In addition it is appropriate to review briefly a few concepts[1] concerning the methodology of constant-price estimates in a few industries and economic sectors.

(a) Agriculture

26. In this sector, it is indices of quantity and not price indices which are the primary indices. The calculation is carried out by means of direct evaluation at constant prices (by multiplying the quantities by the base year prices and not by the deflation of current prices).

27. That does not detract from the usefulness of gathering analytical price indices in this sector using the Laspeyres formula.

28. For that purpose SNA recommends the use of producers' prices, i.e., prices on departure from the farm.

(b) Industrial production (mining, manufacturing, electricity, gas and water

29. In practice, all countries with advanced statistical systems gather both commodity indices and indices of the economic sector type. The former are used to measure quantitative changes in supply of a particular group of goods and services, the latter to measure variations in labour productivity and changes in the incremental capital-output ratios. Although the results of the two types of index may differ markedly (since many activities have substantial non-characteristic secondary productions), they are correlated and in many cases one type of these indices is derived from the other.

30. The production quantity indices are gathered in most cases by deflating the current values by the price indices. In practice, these price indices are gathered on the basis of representative products, i.e., industrial activity is disaggregated into a very large number of groups for which these indices are calculated. The price indices for broader groups, for certain branches of mining manufacturing industry, etc., and for total industrial production are determined as weighted averages of the indices of smaller groups.

---

[1] For more detail see "A system of quantity and price statistics" UN [illegible]/73 of 24 February 1975.

(c) Construction

31. The principal problem in this area arises from the fact that the products are as a general rule unique products for which the traditional methods of calculating indices cannot be applied. In addition a few problems in the design of the calculation of indices emerge more clearly in construction than in other sectors (examples, problems linked to natural conditions and more particularly to the quality of the soil, and to transport costs for building materials). Broadly speaking, three types of evaluation are used:

(i) The first type of evaluation is based on output; but the fact that the products are unique (dwellings for which the characteristics between two periods are comparable only with difficulty) means that this method is used very little. A variant of this type is based on a standard construction unit. However, very few countries use this method (in France). A more promising variant is based on the hedonic approach (example, United States, Sweden). This seeks to measure the differences in characteristics (surface area, heating equipment, mechanical ventilation and other characteristics) and, by determining the regressions between these quality characteristics and the market prices, a "quality index" is arrived at.

(ii) The second type of evaluation is based on the inputs assuming that the movement of inputs and outputs is strongly correlated, although the variations in productivity may lead to differences. The most common method is to cover the inputs on the basis of wages, building materials and sometimes consumption of machines and capital goods by using quantity indices as an approximate measure of the outputs. This type of evaluation is the most common in Africa;

(iii) A third type of evaluation is based on the components of production (walls, floors, etc.). It has its advantages and its relative importance is tending to increase but however raises difficulties in data collection.

(d) Transport

32. It is important to have separate indices for each subcategory of this industry at the same time as separate indices for freight and for passenger transport.

33. The fundamental problem in this industry is linked with the identification of the unit. A transport service can be identified only by reference to a variety of characteristics such as the weight of the products transported, speed, terminal and other facilities provided. However, it is not possible to select units of measurement covered by all these characteristics: in addition it is necessary to adopt units of measurement which reflect only the principal or most important characteristics. Recourse is then had to a classification of elementary units as homogeneous as possible, for example tonne/km, passenger/km and for the aggregation of the elementary indices recourse is had to weighting on the basis of the market values or approximate basic values.

34. It should be mentioned that quantity and price indices are both used in Africa depending on the mode of transport and vary from one situation to another.

(e) Services

35. Two types of index are used:

(i) For non-commercial services, there is no market value since they are not sold on the market (or in other words, their market value is negligible for certain services). In addition the practice is to use weighting based on costs.

(ii) For commercial goods and services, the market value comprises the net operating income and the indirect taxes.

36. The difficulty in separating the price and quantity elements in the services sector is a major problem. Even in evaluating quantities one comes up against difficulties of measurement arising from the unique character of the products; in addition most countries try to discern the quantitative movement on the basis not of deflation but on the basis of extrapolation, i.e., by multiplying the value of these services in the base period by an index based on a selected indicator. Three solutions are possible:

(i) The first and simplest is to use the number of persons employed as an indicator. This solution assumes that the movement in net production is identical to that in employment. There is no allocation for productivity.

(ii) The second solution is to use wages as indicators. This solution assumes that the average wage and the average productivity move in parallel and that a higher average wage reflects greater production. A refinement in the indicators involves distinguishing the modifications in structure in each category of wages (example, wages of teachers at different levels), but this classification does not resolve the problem of differences in productivity.

(iii) Lastly, the third solution involves taking productivity into account, either by assuming a constant rate of rise (example 2 per cent) and applying it each year for as long as no additional information is available, or by applying a rate of variation in productivity in services equal to that of the commercial sectors regarded as comparable (from the point of view of the nature of the work supplied) when reliable information is available. However, in both cases the estimates on productivity are skewed.

C. MOVEMENT OF IMPLICIT PRICE DEFLATOR INDICES BY INDUSTRY AND ECONOMIC SECTOR

1. Movement of implicit price deflator indices by industry

37. Table 2 gives the respective shares of each industry in GDP at factor cost of developing Africa for a few years (1960, 1965, 1970, 1975).

38. Moreover, on the basis of table 1 in annex I, we have concentrated in table 3 the annual average variations in implicit price deflator indices by industry for 14 African countries according to periods which do not always correspond with each other. These countries are those mentioned in the introduction, to which we added Senegal.

39. We have pointed out that the variations in implicit price deflator indices do not always have a precise economic significance and their interpretation seems very delicate, particularly in the services sector.

(a) Agriculture

40. Agriculture holds first place in developing Africa with a quarter of the total GDP. However, its share has relatively diminished since 1960 since its contribution to GDP fell from 41.0 per cent in 1970 to 24.8 per cent in 1975.

41. Implicit price deflator indices in this industry have varied very irregularly as between countries: 1.8 per cent for Egypt compared with 16.5 per cent for Ghana. Seven countries experienced implicit rises for agricultural products of 5 per cent or less (Egypt, Senegal, Sierra Leone, Liberia, Tanzania, Kenya and Ethiopia), while the other countries recorded rises of between 5 and 10 per cent (Tunisia, Nigeria, Zaire, Zambia and Uganda) and only two countries with rates higher than 10 per cent (Libya and Ghana).

42. Compared with the implicit GDP price deflator index, half of the countries saw the relative prices in this industry increase more rapidly.

43. Interpretation of implicit prices in agriculture is fairly delicate: a substantial increase in producer prices in agriculture would lead to a parallel rise in the cost of living and would risk producing an inflationary process. Moreover, a small rise in the prices of agricultural products over a long period would carry the risk of discouraging the producers from investing and improving their agricultural working methods. In fact, two categories of agricultural products must be distinguished in this field:

(i) Concerning export crops, the governments of African countries have a tendency to restrain producer prices at a level always below international prices in order to be able to collect "increments" for budgetary or investment purposes. Although this procedure may be justified, it does not appear that these policies are systematic and stimulation of production by means of prices offers certain advantages:[1]

(ii) Concerning food production, marketing, price determination and storage exert a considerable influence on the supply of agricultural products and any increase in supply may lead to an appreciable fall in the prices of food products; this is the policy of the Price Stabilization Fund and the aim of its activities is to cope with the rise in the population and in the nutritional level of the inhabitants at the same time as discouraging resort to imports of food products, whose import prices to Africa have risen considerably (9 per cent between 1968 and 1974).

(b) Mining

44. The importance of this industry has constantly increased since 1960 for developing Africa. From 4.1 per cent of GDP, its share rose to 19.3 per cent in 1975, showing a very marked increase.

---

[1] ECA, Survey of Economic Conditions in Africa, Part I, 1976.

45. The implicit price deflator indices in this industry measure, subject to a few differences, the variations in world prices of minerals and fuels.

Table 2: GDP at factor cost by kind of economic activity (industries and sectors at current prices of developing Africa (percentages)

GDP at factor cost in current prices by industry and sector	1960	1965	1970	1975
1. By industry				
Agriculture	41.0	36.4	32.6	24.8
Mining	4.1	7.4	11.3	19.3
Electricity, gas and water	1.4	2.1	1.5	1.3
Manufacturing	9.2	9.6	9.9	9.8
Construction	5.2	5.1	5.1	7.6
Commerce[a]	16.0	16.4	15.3	14.3
Transport, storage and communication	6.0	5.9	5.2	5.1
Public administration and defence	7.9	9.6	9.9	10.3
Other services	8.5	7.7	9.2	7.5
Total GDP as a percentage	100.0	100.0	100.0	100.0
2. By major sector				
Physical production	60.9	60.3	60.4	62.8
Services	39.1	39.7	39.6	37.2
Total GDP as a percentage	100.0	100.0	100.0	100.0
Total GDP in billions of US dollars	10.2	14.1	20.5	46.5

Source: ECA, Statistics Division.

a/ Including restaurants and hotels, banks, insurance, real estate and business services.

Table 3. Implicit GDP price deflator indices by kind of economic activity

Annual variation as a percentage

	Years	GDP	Agriculture	Mining	Electricity, gas & water	Manufacturing	Construction	Wholesale & retail trade restaurants & hotels	Finance, insurance and storage services	of which dwelling occupied by the owner	Transport, storage and communications	Public administration	Other services
Tunisia	1969-1974	5.07	5.41	12.65	0.45	6.08	5.55	1.41	1.18	...	2.42	3.39	3.10
Libya	1962-1970	5.00	10.56	3.96	9.31	2.51	12.64	3.91	4.73		3.80	5.39	4.80
Egypt	1964-1973	1.94	1.75	....	-1.73	2.2	-3.86	9.34			0.57		
Senegal	1960-1975	4.83	4.25	9.15	4.19	3.16	3.94	4.72	3.18	3.18	4.65	5.87	6.20
Sierra Leone	1963-1973	4.32	4.88	7.03	-8.90	4.41	1.80	5.14	3.84	-	3.64	0.58	0.58
Liberia	1964-1973	2.16	2.08	1.86	-4.24	2.38	9.67	9.02	5.72	5.55	0.81	2.99	1.24
Ghana	1968-1974	13.54	16.53	17.65	-7.53	11.02	9.62	13.27	5.06	-	9.72	9.62	13.01
Nigeria	1960-1973	4.55	5.29	7.44	0.60	3.12	3.51	4.38	1.53	-	1.98	1.30	...
Zaire	1968-1974	10.28	8.88	10.91	1.81	7.18	7.83	12.32	2.99	-	3.16	13.41	...
Zambia	1965-1976	5.50	5.16	-1.14	-0.57	10.42	8.67	6.21	...	...	7.45	6.18	6.69
Tanzania	1964-1974	4.36	4.37	7.73	1.22	5.78	6.27	5.57	5.04	5.01	3.10	2.98	2.98
Uganda	1960-1971	3.77	5.07	10.71	-0.9	1.52	3.75	3.38	3.80	2.08	0	2.92	3.09
Kenya	1964-1974	3.95	2.35	0.58	2.19	4.54	6.53	5.64	4.38	4.96	2.76	2.56	1.00
Ethiopia	1961-1974	2.05	2.44	2.24	-0.35	1.98	0.49	2.70	1.71	0.86	0.32	1.63	1.95

Source: ECA, from table 1 of annex 1.

46. The sharp rise in the prices of certain products on the international market beginning in 1973 (oil, phosphate and even diamonds) is responsible for the increase in implicit price deflator indices in this industry for a few countries (Tunisia, Senegal, Sierra Leone, Ghana, Nigeria).

47. For the copper-exporting countries,[1] namely Zaire and Zambia, the price variations were less marked for the latter (8.0 per cent as against 13.1 per cent for the period 1970-1974), in particular because of certain fortuitous difficulties (flooding of the Mufulira mine in 1970, closure of the border with Southern Rhodesia in January 1973).

48. Since the variations in implicit price deflator indices for the non-mining countries are not significant, we may merely note as an observation the relatively low rates of increase for Libya (because of small variations in the price of oil during the period 1962-1970) and for Liberia (which draws two thirds of its export income from iron, for which the world price varied by only 2.1 per cent during the period 1964-1973).

(c) Electricity, gas and water

49. The share of this industry in the GDP of developing Africa is fairly negligible (1.3 per cent in 1975 compared with 1.4 per cent in 1960).

50. Since this industry has relatively higher productivity than other industries, which is sometimes reflected in price falls, we have for seven countries negative rates of increase in the implicit price deflator index (Egypt, Sierra Leone, Liberia, Ghana, Zambia and Ethiopia) and for six other countries rates of increase lower than 2.3 per cent (Tunisia, Libya, Nigeria, Zaire, Tanzania, Kenya). Only Senegal recorded a higher rate (4.2 per cent on average above all because of 1974 and 1975).

(d) Manufacturing

51. The share of this industry in the GDP of developing Africa remained more or less stable between 1960 and 1975 (9.2 to 9.9 per cent).

52. Manufacturing industries in Africa are partly industries based on agriculture and partly, if not mainly, import-substitution industries.

53. The prolonged drought since 1971, which has hit a large part of the region, has had the effect of reducing activities in the processing of agricultural products in some countries (for example, Ethiopia, Kenya, Sahel Zone) and increased the dependence of this industry on imported raw materials. Furthermore, the rise in the latter, more particularly since 1973, and the general increase in the cost of transport linked with the rise in the cost of fuel were unfavourable factors for this industry. A fairly high degree of protection and wage increases were added to the difficulties of this industry in certain countries.

54. All these factors harmed the comparative advantages of this industry and explain for some countries the rise in the implicit price deflator index of more than 5 per cent (Tunisia, Ghana, Zaire, Zambia, Tanzania). In other countries (nine) where the rise in the implicit price deflator index does not exceed 5 per cent, it is remarkable to note that despite these difficulties the rates of increase remained relatively low. However, it should be pointed out that for six of them, the period covered is before 1974 and it would appear that an appreciable rise can be assumed after that date.

---

[1] No account was taken of Southern Rhodesia.

(e) Construction

55. This industry is of growing importance although it figures only to a small extent in the GDP of developin Africa (5.2 per cent in 1960 as against 7.6 per cent in 1975).

56. The implicit price deflator index in this industry in most cases reflects variation in prices of inputs, namely: building materials and wages.

57. The rises in the implicit price deflator index were marked in seven African countries (Tunisia, Libya, Ghana, Zaire, Zambia, Tanzania, Kenya) with rates above 5 per cent. It appears that these increases can be attributed more to wage rises than to the prices of building materials for six countries of the nine (see table 10).

58. It should be mentioned that one country (Egypt) recorded a negative rate of increase as a result of a high implicit index in 1964 (140.6 in 1964 compared with 100.0 in 1970).

(f) Wholesale and retail trade, restaurants and hotels

59. Trade is the most important service sector (38 per cent in 1975) but its share in the GDP of developing Africa has constantly declined since 1960, although only slightly (16.6 per cent in 1960 compared with 14.3 per cent in 1975).

60. Gross value added in this sector is made up of margins and the changes in the implicit indices indicate in principle the evolution of the margins indicated for goods put on sale. It would have been desirable to make distinctions such as wholesale and retail trade, restaurants and hotels and breakdowns according to the various sales channels (supermarkets, family shops, rural market or co-operatives) so that the interpretations were meaningful. In addition, the differentiations in the margin rates between imported products and local products would have permitted useful comparisons. In the absence of these detailed data the implicit index provides only a general indication of the margin rates.

61. The implicit price deflator index varied between 2.0 per cent for Liberia to 13.3 per cent for Ghana. For four countries these rates varied between 5 per cent and 10 per cent, namely Sierra Leone, Zambia, Tanzania, Kenya, and for two countries these rates were over 10 per cent, namely Ghana and Zaire. For two countries (Ghana, Zambia) it seems that the rise in these rates is attributable more to increases in the cost of transport than to increases in the cost of distribution.

(g) Finance, insurance, real estate and business services

62. This sector contributes only a small share of the total production of services in most developing countries (of the order of 5 per cent).[1/]

[1/] OECD, Service Activities in Developing Countries, Paris, 1974.

63. The conceptual problem as well as the application of valid indicators in this sector constitute a source of major difficulties for the comparability of the data. It should be mentioned that a few countries have adopted the rules of the new SNA which involve the allocation as a lump sum of an imputed service charge regarded as a nominal industry (examples: Zaire, Botswana, Tanzania, etc.).

64. It should be pointed out that some countries use as deflators for the finance sector the consumer price index (examples: Sierra Leone, Ethiopia), others the wholesale price index (example: Zambia), others wages (example: Nigeria), which makes comparison difficult (see table 4).

65. Nevertheless the emerging trend is that the rise in this sector remains relatively modest and only three countries have recorded rises of between 5.0 per cent and 5.7 per cent (Liberia, Ghana, Tanzania).

(h) Real estate

66. The proportion of dwellings occupied by their owners is far from negligible and it is not without interest to provide a brief survey of imputed rents.

67. In some countries, the imputed rents are not taken into account (examples: Ghana, Nigeria, Zaire). It may also happen that they are applied only to dwellings in urban areas.

68. Imputed rents correspond, at least in principle, to the market prices actually paid for rented dwellings with the same characteristics. In the event that certain special categories of dwelling are in practice never rented on a commercial basis (and that happens for traditional rural dwellings), the imputed rents are estimated as being equal to the annual depreciation.

69. The implicit index for housing services corresponds for most African countries to the retail price index for rent which often corresponds to a special type of dwelling. Differences in quality often make comparison of data extremely delicate. Furthermore, certain rents are subsidized (example, State officials' housing) or are controlled.

70. Taking these considerations into account, the change in the implicit rates in this sector varied between 0.6 per cent for Egypt (which leads one to assume price control) and 5.5 per cent for Liberia.

71. It appears that calculation of "realistic" rent indices is virtually impossible for African countries in view of the differences in kind between urban and rural dwellings.

(i) Transport, storage and communication

72. This sector occupies a rather small share of GDP of developing Africa. The smallness of the share (5.1 per cent in 1975) risks being a bottle-neck for other sectors and thereby causing a rise in their prices.

73. Estimates concerning this sector are the subject of a shole set of indices, both of price and of quantity, which correspond to the various activities. Some countries use retail or wholesale transport price indices. Others, such as Nigeria, use a wage index. Uganda uses double deflation in this sector (see table 4). The first procedure is inadequate both for weighting and for the field covered. The second leads to distortion to the extent that a large share of the services incorporate a great deal of capital the third procedure is complex and does not appear capable of being generalized.

74. Taking these considerations into account, we will point out that only two countries recorded rises in their implicit price deflator indices of more than 5 per cent (Ghana, Gambia). We shall also mention that three countries recorded negligible rises of less than 0.6 per cent (Egypt, Uganda, Ethiopia) and it seems that these small increases are not sufficiently realistic.

(j) Public administration

75. This sector in 1975 occupies a more important position than manufacturing. Its share in the GDP of developing Africa rose from 7.9 per cent in 1960 to 10.3 per cent in 1975. This share appears to be undervalued when it is realized that, in some countries military information is regarded as confidential and is not forwarded to the statistical offices.

76. Gross value added in this sector consists of payments for factors of production, i.e., remuneration of employees, rent and capital depreciation and it is the first of these factors which is the major element.

77. In principle, comparison of implicit price deflator indices in this sector should reflect trends in average wages; however, some countries (Tunisia, Liberia) use the consumer price index to deflate the current values while Zambia uses a partial index of wholesale prices, which are far from being correct instruments (see table 4).

78. The rise in the implicit price deflator index varied between 0.6 per cent for Egypt to 13.4 per cent for Zaire. Four countries recorded rises between 5 and 10 per cent (Libya, Senegal, Ghana, Zambia), while nine others recorded increases of less than 5 per cent.

(k) Other services

79. We have mentioned that this sector is an amalgam of a few sectors which are far from being homogeneous.

80. The share of this sector in the GDP of developing Africa has fluctuated more widely than any other sector (8.5 per cent in 1970, 7.7 per cent in 1975, 9.2 per cent in 1970 and 7.5 per cent in 1975), and it appears that the mode of classification is largely responsible for these fluctuations.

81. Differences in classification between the countries themselves and intricate conceptual problems in the evaluation of prices in this sector and principally in the most important activities among them (education and health) prevent an easy interpretation of the implicit price deflator index in this sector taken as a whole. For three countries (Egypt, Sierra Leone, United Republic of Tanzania), the implicit price deflator index in this sector is the same as that of the public administration sector and, apart from Ghana, the evolution of the implicit price deflator index in this sector has been parallel to that in the public administration sector.

2. Movement of implicit price deflator indices in the monetary and non-monetary GDP

82. Non-monetary activities have been defined[1] as activities the purpose of which is the production of goods and services for own use by the producers, and not as a means of exchange for money.

83. The need to include these activities in the economic accounts is recognized (see table 27 of SNA). However, a model classification of these activities has not yet been drawn up and it has been proposed[2] to include for example activities such as education and community activities.

(a) Importance of non-monetary activities in Africa

84. The importance of these activities may be measured by their share in GDP which was estimated in 1966 for 27 African countries[3] at almost a quarter of their GDP at factor cost: agriculture occupying a minimum of three quarters of the non-monetary GDP.

85. Although the share of these non-monetary activities has diminished in relative terms for most African countries, they nevertheless remain a very important sector for certain countries and exceed 40 per cent of GDP for Liberia, Chad, the Niger and Ethiopia, and even 50 per cent for Rwanda and Burundi.

(b) System for the evaluation of producer prices for non-commercial production

86. SNA recommends the application of producer prices for the evaluation of both commercial and non-commercial production. SNA defines the producer price for these products, for the most part agricultural, as the prices on departure from the farm. In the event that the producer sells no part of his production, the prices applied should be those used by producers in the same area or neighbouring areas selling identical or similar goods.

---

[1] Working group on non-monetary transactions in Africa Addis Ababa, 1960.

[2] Report of the Inter-regional Seminar on the Revised System of National Accounts. Caracas, 8-19 December 1975. DP/UN/INT-72/104.

[3] Preliminary study on non-monetary transactions in Africa. E/CN.14/CAS.7/19. 19 August 1971.

Table 4: Deflators: Recommendations, national practices observed and applicati

	International recommendations[1/]
Agriculture, stock breeding, forestry, fisheries	Agriculture and stock breeding
	Total including construction on own account
	Hunting, trapping, game
	Forestry
	Fisheries
Mining	
Electricity, gas and water	
Manufacturing	Total except the following
	Manufactures of metal machinery and equipment
	Handicrafts
Construction	Total
	Construction on own account
Wholesale and retail trade, Restaurants and hotels	Wholesale and retail trade
	Restauratns and hotels
Transport, storage and communication	Railways
	Road transport (taxis, buses,lorrie
	Water transport
	Air transport
	Storage
	Communications

s by ECA to countries with no data at constant prices

Manner of deflation and price indices 4/	Some differences between national practices observed with the recommendations 2/	Applications by ECA to countries with no data at constant prices 3/
DPI/IPP	Most of the countries,	Balance with adjustment
WI	except Zambia WPI, Libya	
	DD, Uganda CPI	IEP
IPOC		
IPOC		
IPP		
DPI/IPP	Most countries,	WPI, IPI, (less oil
	Zambia WPI,	and cereals)
	Libya IEP	
DPI	Most countries,except	
	Zambia WPI	
	Uganda CPI	
WPI	Nigeria IPOC, + IPI,	
	Tanzania WI	
	Zambia WPI, Liberia	
	and Uganda CPI (P)	
IPI + WI		
DPI		
WPI (P) + WI	Tunisia, Zambia: IPI + WI	
	WPI (P)	
WI	Nigeria, **Tanzania WI**	
ICP (P) + WPI (P)	Nigeria, Sierra Leone,	ICP
SPI	Liberia, Ethiopia ICP (P),	
	Zambia, **WPI (P)**,	
	Uganda IIP	
SPI	Uganda DD,Nigeria ICP	ICP, possibility of using
IPOC	Zambia ICP (P)	price of oil and freight
SPI	Nigeria WI	
SPI	Nigeria WI	
....	Zambia WPI (P)	
SPI	Nigeria WI, Sudan IEP + IIP,	
	Ethiopia ICP	

Table 4: Deflators: Recommendations, national practices observed and applications by ECA to countries with no data at constant prices (cont'd)

	International recommendations 1/	Manner of deflation and price indices 4/	Some differences between national practices observed with the recommendations 2/	Applications by ECA to countries with no data at constant prices 3/
Finance and insurance	Banks and financial services	ICP	Sierra Leone, Ethiopia ICP, Zambia WPI (P), Nigeria WI	ICP
	Property companies SPI			
	Insurance (life and other forms)	ICP + DPI		
Bank service charges	....	....	Zambia WPI (P)	ICP
Landed property and other business services	Landed property		Nigeria WPI (P)	ICP
	- Paid and imputed rent	ICP (P)		
	- Other premises	SPI		
	- Other business services	WI		
Public administration and defence	(Distinguish civilian and military)	WI	Tunisia, Sudan, Ethiopia ICP (P), Zambia WPI (P)	ICP
Personal services		ICP (P)	Tunisia, Liberia ICP (P), Zambia WPI (P), Nigeria WI	ICP
Health services and similar community services				
Import duties	.....		Zambia WPI (P)	

Note: This table does not claim to be a complete typology because of incomplete data for certain African countries. Furthermore, some modifications may have been made with time.

1/ International recommendations based on document ST/STAT/15 of 9 October 1969: "National accounting data in constant prices"

2/ National practices based on document E/CN.14/NAC/23 of 28 September 1966, National accounting practices at constant prices in Africa, supplemented by the following countries: Sierra Leone: ECA questionnaire on prices and quantities 1969. Zambia: National Accounts 1970. Central Statistical Office, February 1973. Libya: National Accounts Statistics of the Libyan Arab Republic. Sources and Methods Ministry of Planning, October 1972. Liberia: Sources and Methods of estimation of National product 1970-1973. Ministry of Planning and Economic Affairs, July 1975.

3/ See text.

4/ Codes:
- DD Double deflation
- IPP Index of producer prices
- IEP Index of export prices
- IIP Index of import prices
- IPO Index of prices of characteristic output
- IPI Index of prices of inputs (example materials consumed by manufacturing, building materials)
- WI Wage or salary index (wage earnings and rates, unit costs of manpower)
- WPI Wholesale price index (G) = general (P) = partial
- ICP Index of consumer prices (G) = general,,(P) = partial
- SPI Special price index
- DPI Derived price index.

87. However, information in most countries is inadequate and unreliable, both for physical non-commercial production and for producer prices. An OECD analysis of non-monetary activities in 70 developing countries, including 33 in Africa, shows that the price evaluation systems differ from one country to another and that for some the information is non-existent.[1] The study also shows that countries rarely attempt to estimate "farm prices" accurately.

88. Some countries such as the Sudan and Burundi deduct from the prices actually received by the farmers an approximate allocation of 10 per cent (estimate of transport and distribution costs) in order to arrive at the "farm price".

89. In the majority of cases, no attempt is even made to obtain these farm prices and the producer prices are drawn from the prices actually received by the farmers when they sell their crops. In countries where the peasant sells his crop directly to the consumer at the village market, the producer prices for these crops are then the consumer prices; this applies, for example, to the Gambia and Nigeria.

90. In some countries the peasants sell their crops to wholesale traders; as a result, the subsistence production is assessed on the basis of the wholesale prices; this is the case, for example, in Ghana and Sierra Leone.

91. Lastly, many countries use fixed purchase prices of public institutions which enjoy a near-monopolistic position and the prices applied by these institutions are taken as producer prices; this applies, for example, to Rhodesia, the United Republic of Tanzania and Kenya.

(c) Movement of the implicit price deflator index of monetary activities

92. Table 3 in annex I sets out trends in the implicit price deflator index or monetary and non-monetary GDP by sector for six countries for which data are available, namely: Zaire, Zambia, Malawi, the United Republic of Tanzania, Uganda and Kenya. The sectors covered are agriculture in the broad sense, building and construction and dwellings occupied by their owners. Similarly, an additional sector is laid down in Kenya, namely: Transport of water. Table 5 below condenses these data and attempts to measure the gaps between monetary and non-monetary activities.

93. In terms of over-all comparison, table 5 shows that the implicit price deflator index of the monetary and non-monetary GDP has evolved differently depending on the country: the gaps between these two categories vary at an annual rate between -2.9 per cent for Uganda to +5.3 per cent for Zaire. In fact these gaps in the over-all implicit price deflator index conceals sectoral disparities and it is necessary to follow the implicit price deflator index by sector, year by year, country by country, in order to understand these gaps. In this way, for example, the exceptional increase in the prices of agricultural products in Uganda in 1970 (+12.3 per cent) is responsible for a large part of the negative over-all gap observed. Similarly, the fall of 40 per cent in Zambi copper in 1975 caused a drop of 20 per cent in its implicit index of the monetary GDP, which explains the negative over-all gap.

---

[1] Non-monetary (Subsistence) activities in the national accounts of developing countries by Derek Blades, OECD 1975.

94. On the other hand, in terms of comparison by sector, the price gaps between monetary and non-monetary activities show a much less marked disparity, except for Zaire. For the other countries there is a negative gap of not more than 0.4 per cent as an annual average and a median gap of between +0.6 and 0.9 per cent. More or less identical price evaluation systems explain the smallness of these gaps and it is difficult to understand the origin of the large gap for Zaire (+7.2 per cent as an annual average).

Table 5: Variation in the implicit price deflator index by monetary and non-monetary activity. Annual percentage Annual percentage variation

Country and years		Gross domestic product			Agriculture			Building and consutruction			Dwellings occupied by the owners		
		M 1	N-M 2	deviation 3 = 1-2	M 1	N-M 2	deviation 3 = 1-2	M 1	N-M 2	deviation 3 = 1-2	M 1	N-M 2	deviation 3 = 1-2
Zaire	- 1970-1974	11.47	16.16	5.31	14.06	6.78	7.22	7.79	5.69	2.10	-	-	-
Zambia	- 1965-1975	2.87	5.07	-2.20	4.94	5.07	-0.13	-	-	-	-	-	-
Malawi	- 1964-1974	3.49	3.54	-0.95	-	-	-	-	-	-	-	-	-
Tanzania	- 1963-1970	4.11 1/	4.95	-0.84	4.38 1/	4.81	-0.43	6.27 1/	5.35	0.92	...	5.38	...
Uganda	- 1963-1970	3.54	6.39	-2.85	3.79	2.57	1.22	7.72	6.80	0.92	5.21	3.86	1.35
Kenya	- 1964-1974	3.46	2.37	1.09	2.56	1.98	0.58	7.70	3.99	3.71	5.34	3.99	1.35

Abbreviations: M = monetary activities.
N-M = non-monetary activities.

Notes: 1/ Monetary + non-monetary total

Sources: See Annex I Table III.

PART II

EMPIRICAL RELATIONS BETWEEN IMPLICIT AND ANALYTIC PRICE INDICES FOR SOME AFRICAN COUNTRIES

A. INTRODUCTION

95. The implicit GDP index is the most appropriate measure to use to follow the general movement of prices in the economy and identify inflationary pressures at the sector and industry levels. However, the frequency with which it is calculated is low as we have seen that only 14 countries provided such data.

96. Time is required to gather detailed data on prices and insert them into the national accounts framework, which explains the delays in the publication of data at constant prices. Meanwhile, it is vital for economic management to have price indicators drawn up at regular, very close intervals in order to be able to discern variations in the intensity of inflationary pressures. These indicators are the analytic indices of consumer prices, which are available for most African countries, and of wholesale prices, published by 18 African countries, and it is useful to compare them with the implicit index of GDP. This will be dealt with in a first section.

97. Furthermore, these implicit GDP indices are used to deflate variations in the value of representative aggregates of economic activity as a whole. The empirical analysis between the implicit deflator indices by sector and other analytic price indices available or calculated would enable ECA to arrive at a practical methodology and apply it for African countries with no national accounts data at constant prices and even provisionally for countries which publish such information only after a delay.

98. Finally, since the consistency of the implicit price deflator indices cannot be appreciated properly without reference to the over-all balance of the operations on goods and services, we felt it useful to devote a section of this study for expenditure imputed to GDP. Comparison of the implicit indices of different final uses of goods and services with other analytic price indices will permit better checking of the consistency of the implicit adjustment index of GDP by kind of economic activity.[1]

B. IMPLICIT PRICE DEFLATOR INDICES OF GDP CONSUMER AND WHOLESALE PRICES

99. Comparison of the coefficients of variation[2] between implicit GDP price deflator indices, consumer prices and wholesale prices, in table 6 based on table 1 of annex II shows that for six African countries possessing these three indices, four countries (Tunisia, Ghana, Zaire, Ethiopia) have their wholesale price index closer to the implicit index, with a minimum deviation of 2.85 per cent for Ethiopia, while for two countries (Egypt and Zambia) the consumer price indices are a closer measure of the implicit index, with however, more substantial deviation of the order 4.43 per cent for Egypt (however, reservations must be made for Zambia because of the different periods taken into consideration).

---

[1] Refer also to the ECA documents: Estimates on national accounting aggregates at constant prices (ECA, May 1971). An analysis of sectoral deflators for African countries, Statistical and Economic Information Bulletin for Africa, No. 6.

[2] Standard deviations divided by the arithmetic.

100. The gaps between the consumer price indices and the wholesale price indices (11.11 per cent in the case of Zambia) may be explained by the difference in the composition of the products in the two indices, and by the level which the prices have reached. In view of the considerable variations in a few basic products (oil, copper, oil-seeds and a few other agricultural products) since 1973 for the countries selected, it appears as a result that the wholesale price index better reflects the trends in the over-all implicit index.

101. On the basis of the international comparisons,[1] we observe that for 19 developing countries calculating these three indices, 10 countries have their wholesale price index closer to the implicit index compared with nine countries for the consumer price index. In addition, the deviations between these two indices and the implicit index of total GDP are more and more sensitive starting in 1973, which complicates the problems of over-all transposition of indices.

102. The current inflation is at the root of substantial price distortions in the various economic sectors and the application of a single deflator to the GDP on the basis of consumer or wholesale prices cannot be accepted. In addition, it is necessary to seek price indices which can, as far as possible, measure variations in implicit price deflator indices by sector.

Table 6: Deviations between the implicit GDP price deflator index, consumer prices and wholesale prices for some African countries - Percentage variation (coefficients of variation in the implicit GDP price deflator index = 100)

Country and year		Consumer price	Wholesale price
Tunisia	1960-1974	-4.36	+1.69
Egypt	1964-1973	+4.43	+5.56
Ghana	1968-1974	-6.72	+1.80
Zaire	1968-1974	+7.34	-1.09
Zambia	1965-1974	+1.20	+12.31
Ethiopia	1961-1974	+4.80	+2.85

Source: Table 1 of Annex II.

---

[1] See Yearbook of National Accounts 1975, volume III and various issues of the Monthly Bulletin of Statistics.

C. IMPLICIT GDP PRICE DEFLATOR INDICES BY KIND OF ECONOMIC ACTIVITY

103. The weighting of the sectors in the total GDP of each country and the inflationary pressures prevailing in these sectors provide assistance in explaining the variations in the total implicit adjustment index.

104. The variations in the implicit price deflator index by sector are given in table 2 of annex II, from which may be drawn a comparison of the deviations between the implicit price deflator index by sector and the implicit price deflator index of total GDP (see table 7).

105. The deviations show substantial disparities between the implicit price deflator indices by sector and for total GDP. In other words, the relative price indices in each sector evolve very differently compared with the GDP adjustment index.

106. In terms of the average of the 13 countries, the mean coefficient of variation in the implicit price deflator index by sector fluctuated between -6.02 per cent and +11.67 per cent compared with total implicit index.

107. Within the sectors, marked deviations appear for the various countries and relate for more than half the countries to mining with positive gaps of up to 42.35 per cent for tunisia and negative gaps concerning in particular electricity, gas and water (-27.55 per cent for Tanzania) and the services sector.

1. Implicit agricultural price deflator index, agricultural export prices and consumer prices for food products

108. Table 3 of annex II gives a comparison between the coefficients of variation in the implicit agricultural price deflator index, agricultural export prices and consumer prices for food products. An additional column has been added for a combined index of these two latter indices.

109. Table 7 below shows that in terms of the average for the 13 countries the consumer price index for food products appears to be a better approximation of the implicit agricultural price deflator index with a deviation of +2.29 per cent; however, this over-all deviation conceals substantial disparities between the countries concerned rising from -11.45 per cent for Libya to +10.54 per cent for Zaire; this wide range of deviations is even greater for agricultural export prices where the deviations compared with the implicit price deflation index vary between -10.35 per cent for Nigeria to +26.78 per cent for Liberia.

Table 7: Maximum deviations between the implicit price deflator index by sector and for total GDP prices - Percentage variation (coefficients of variation in the implicit GDP price deflator index = 100)

Country and year		Maximum positive variations		Maximum negative variations	
		Percentage	Sectors	Percentage	Sectors
Tunisia	1960-1974	42.35	Mining	16.10	Electricity
Libya	1962-1970	19.42	Construction	8.06	Manufacturing
Egypt	1964-1973	6.27	Construction	4.11	Public Admin.and other services
Sierra Leone	1963-1973	21.18	Electricity	10.17	"" "" ""
Liberia	1964-1973	10.47	Finance	2.67	Other services
Ghana	1968-1974	19.75	Mining	10.20	Finance
Nigeria	1960-1973	15.74	Mining	14.45	Public Admin.
Zaire	1968-1973	11.72	Mining	18.22	Electricity
Zambia	1965-1974	20.38	Mining	7.13	Electricity
Tanzania	1964-1974	-	-	27.55	Electricity
Uganda	1960-1971	3.83	Mining	12.73	Public Admin.
Kenya	1964-1974	6.18	Construction	6.76	Other services
Ethiopia	1961-1974	10.40	Other services	5.44	Transport

Source: Table 2 of annex II.

110. If we restrict ourselves to maximum deviations of about ±5 per cent, the countries studied fall into three categories:

- A first category where agricultural export prices are a better approximation of the implicit agricultural price deflator index: Tunisia, Libya, Zambia, Tanzania and Uganda;
- A second category in which consumer prices of food products are a better approximation of the implicit agricultural price deflator index: Sierra Leone, Liberia, Kenya, Ethiopia.
- A third category in which the combined index of the two preceding indices provides a better approximation of the implicit agricultural price deflator index: Ghana, Nigeria.

Table 8: Deviations between agricultural export prices and consumer prices of food products and the implicit agricultural price deflator index - Percentage variations (coefficients of variation in the implicit agricultural price deflator index = 100)

Country and year		Agricultural export prices	Consumer prices of food products	Weighted combined index[a]
		I	II	III
Tunisia	1960-1974	1.32	-2.84	-1.89
Libya	1962-1970	1.47	-11.45	-11.37
Egypt	1964-1973	10.47	8.75	9.23
Sierra Leone	1963-1973	6.05	1.20	2.00
Liberia	1964-1973	26.78	1.11	12.46
Ghana	1968-1974	11.00	-6.22	- 0.27
Nigeria	1960-1973	-10.35	7.35	5.14
Zaire	1968-1974	6.05	10.54	9.00
Zambia	1965-1974	-0.92	2.24	2.13
Tanzania	1964-1974	4.31	5.24	4.90
Uganda	1964-1971	-2.02	6.14	0.88
Kenya	1964-1974	12.65	3.33	6.63
Ethiopia	1961-1974	6.22	4.37	4.59
Average		5.37	2.29	3.34

[a] The exported agricultural products are weighted on the basis of the relative value of these products in agricultural value added at factor cost in 1970, while food products consumed are weighted on the basis of the balance. This very rought measure is fairly disputable but does not in any way affect the conclusions.

111. *A priori*, it would appear that the greater the relative share of exported agricultural products in value added in agriculture, the more the index of prices of these products would approach the index of implicit agricultural prices. However, national policies relating to Stablization Funds and Marketing Boards (regulation of producer prices, storage, income policy, etc.) vitiate the correspondence. This is the case, for example, in Liberia, Ghana, and Kenya where the relative share of exported products amounts respectively to 44.2 per cent, 35.0 per cent and 35.4 per cent of value added in agriculture.

112. As a result, it does not appear that it would be useful for ECA to calculate, with a view to deflation, an index of exported agricultural products or a combined index along the lines described above and the need to apply an index of agricultural producer prices seems inevitable in view of the importance of this sector in total GDP.

113. However, the near-absence of such indices of producer prices in African countries and of very partial and very irregular agricultural price statistics for most countries oblige us to deal with the implicit price deflator index in this sector by calculating the balance for the countries which have no detailed data on producer prices. Of course, that will not prevent us from making adjustments on the basis of the information available for a few countries.

2. Implicit price deflator index and export prices of mining products

114. Table 4 in annex II gives coefficients of variation for mining products, at least for countries with a substantial or at least not negligible mining industry. In terms of the average for the nine countries, the coefficient of variation is 29.94 per cent for the implicit price deflator index as against 29.25 per cent for export prices. For four countries (Libya, Egypt, Sierra Leone and Zambia) the gaps between the two coefficients of variation do not exceed 6 per cent; on the other hand, for five countries (Tunisia, Liberia, Ghana, Nigeria and Zaire) these gaps are over 10 per cent.

115. Since mining production in African countries is to all intents and purposes oriented towards exports, it would appear *a priori* logical to assume a degree of correspondence at least between variations in producer and export prices. However, the impact of indirect taxation and occasional variations in stocks (Tunisia, Ghana and Zaire for 1974) and quite simply deviations arising from the periods taken into consideration (calendar year for export prices, from 1 April to 31 March for the implicit price deflator index in the case of Nigeria) largely explain the origin of these differences.

116. These differences linked with incidental factors, do not appear to detract from the possibility of transposing these two indices.

3. Implicit price deflator index for electricity, gas and water, and consumer prices of fuel and lighting

117. It appears *a priori* possible to link the classification by kind of economic activity of the electricity, gas and water sector with the fuel and lighting category contained in the classification of household goods and services (table 6.1 of SNA).

118. However, differences in the weightings used and the varieties of prices taken into consideration explain to a large degree the variations between the coefficients of variation of the two indices (see table 5 of annex II). Although in terms of total average the coefficients of variation of the implicit price deflator index and consumer prices of fuel and lighting show a very small variation (-0.53 per cent), only three countries out of 12 have their two indices fairly close: Egypt, Ghana and Uganda.

119. In view of this asymmetry in the rates of variation and the fairly small share of the electricity, gas and water sector in the GDP of each country and that of developing Africa (1.3 per cent in 1975), it does not appear useful to seek to transpose the indices at this level, especially as for many African countries the statistical data relating to this sector are often aggregated with manufacturing industries.

4. Implicit price deflator index for manufacturing, consumer prices of food products and clothing, wholesale prices and import prices

120. The evaluation of the implicit price deflator index in manufacturing is fairly complex and any attempt to transpose indices must be made with caution. Table 6 in annex II gives the coefficients of variation in the implicit price deflator index in manufacturing, consumer prices of food products and clothing and wholesale prices and import prices. On the basis of these data we have classified the countries according to whether the given price index is more appropriate or less appropriate to replace the implicit index of manufacturing (see table 9).

121. It will be observed that for the countries which have a wholesale price index, this index provides a fairly close measure of the implicit price indices in this sector, except for Egypt and Zaire where the gaps are respectively 5.66 and 5.76 per cent.

122, Furthermore, since import prices are very important indicators of sensitivity in judging variations in this sector because of the dependence of African economies, we have compared the two indices. It emerges that for five countries (Egypt, Ghana, Nigeria, Zaire and Uganda) the gaps do not exceed 1.5 per cent, and for three countries (Tunisia, Libya and Sierra Leone) these deviations do not exceed 4 per cent.

Table 9: Deviations between consumer prices of food products and clothing, wholesale prices, import prices and the implicit price deflator index for manufacturing industries - Percentage variations (coefficients of variation of the implicit price deflator index for manufacturing industries = 100)

Country and year	Wholesale prices Deviations (per cent)	Import prices Deviations (per cent)	Consumer prices -Food products Deviations (per cent)	Consumer prices -Clothing Deviations (per cent)
Tunisia 64-74	0.23	(Tunisia 60-74)2.93		
		Libya 62-70 -2.14	Liberia 64-73 3.30	(Egypt 64-73(-4.14)
(Egypt) 64-73	5.66			
Zaire 68-74	5.76	Egypt 64-73 0.23	Tanzania 64-74 3.10	Sierra L.63-73 -2.
(Ghana) 68-74	(2.43)	(Sierra L.63-73(-3.91)	Kenya 64-74 -2.31	
(Zambia) 65-74	(-2.29)	Ghana 68-74 -0.67		
Ethiopia 61-74	2.32	Nigeria 60-73 -1,37		
		Zambia 65-74 -0.84		
		Uganda 60-71 -0.14		
Average:	2.77	Average: -0.60	Average: 1.39	Average: -2.03

Source: Table 6 of annex II.

Note: The figures between brackets express a decreasing order of priority in the transposition of indices and are not taken into account in the calculation of the average.

123. However, if the series are looked at more closely, it can be seen that for most countries with data for 1973 and 1974 there is from these years onwards a growing gap between import prices and the implicit price deflator index in manufacturing industries due to world inflation and more particularly to the rise in price of imported crude petroleum. This observation also applies for the other developing countries.

124. These considerations argue in favour of a comparison of the implicit price deflator index in manufacturing industries, not with the price index for total imports, but only with the index of a few sectors of products of the standard international trade classification which are of more special relevance to the local manufacturing industry in each country. However, this idea poses problems in terms of the choice and the selection of the sectors and products to be identified and is rarely possible as a result of the lack of detailed information at this level for most African countries. The practical solution is to exclude from total imports those relating to crude petroleum (because of the price distortions) and to cereals (since these goods are rarely imported with a view to processing).

125. As food products constitute an important component of African manufacturing industries, it seems natural to compare the consumer prices of these products with the implicit price deflator index of manufacturing industries. Although this correspondence is fairly clear for some developing countries, it appears rather limited in Africa and relates to only three countries, namely: Liberia, Tanzania and Kenya with deviations of about 2 to 3 per cent.

126. Finally, as far as the consumer price index for clothing is concerned, its correspondence with the implicit price deflator index of manufacturing industries appears for only one country (Sierra Leone) and it does not seem that one should see in this a criterion to be selected in view of the fairly low share of the weighting of this group in the production of the sector of many African countries.

127. The combined index of this group with food products is appropriate for only two countries (Sierra Leone and Kenya) and it does not appear useful to generalize this usage.

128. The above considerations lead to two important observations: in the first place, it is clear that we can validly select for this sector the transposition of the available wholesale price indices. (In the case of Egypt, a partial wholesale price index on the basis of the combination of the products of intermediate products and finished products would apply better). In the second place, for the country which has no wholesale prices, it would be necessary to transpose a partial index of import prices (total imports - crude petroleum and cereals). This method seems all the more acceptable as it concerns countries in which the dependence of this sector vis-à-vis foreign countries is high.

5. Implicit price deflator index for construction wages in the construction industry and prices of building materials

129. We have seen that very few countries in the world (example, United States and Sweden) calculate implicit price indices of "output" production of the construction sector but only indices of the "inputs" entering into the production of this sector (building materials, cost of manpower) assuming a correlative variation in prices between output and input.

130. Unfortunately, the scope of our comparisons is very limited in this field as only three countries out of the 13 studied publish a price index for building materials, namely: Egypt, Zaire and Zambia. For the other African countries which do not at present have implicit price deflator indices in the construction sector, only the following six countries regularly publish data on the prices of building materials: Morocco, Sudan, Senegal, Ivory Coast, South Africa, Southern Rhodesia. For these countries it seems quite appropriate to apply these indices to the construction sector in view of the clear relation apparent between these indices and the implicit indices for the three countries concerned (see annex II, table 7) with, however, a reservation in the case of Egypt since the development of the indices has been divergent although the coefficients of variation show only a small deviation.

131. Nevertheless the number of countries covered under the building materials approach is inadequate and it is tempting to view the compdrison of the implicit price deflator index with the other element of the input, namely the cost of manpower (wages plus certain social benefits and contributions from firms). Since these statistics are not always available, it suffices for us to retain merely wages. Although the series on wages are published with a certain delay (see synoptic table 25, information is available on wage earnings and rates in construction for 16 African countries and on average wages in construction for 17 African countries. The number of countries providing one series or the other totals 29 for wages in construction.

132. However, even when certain relations might emerge with the implicit indices, it would be risky to assume a parallel evoltuion in the prices of building materials and wages. Table 10 below shows a degree of divergence in the evolution of the two rates of growth. What solution can be found? To attempt to gather prices on a product such as cement and assume that this product evolves in parallel with the other building materials?

133. Two major problems arise in this case: firstly, the weight of this product in the building materials used is fairly low (between 9.4 per cent and 27.3 per cent for those of Senegal and the Ivory Coast). Secondly, the evolution in the price of this product stands markedly apart from the total index of prices of building materials which includes products available locally such as quarried stone, sand, timber, clay, etc.) which evolve slowly and imported products such as metal, chemical products and electrical materials which experience higher rates of increase.

Table 10: Variations in the implicit price deflator index for the construction sector, prices of building materials and cement and wages (annual rate of variation as a percentage)

Country and year		Implicit price deflator index of the construction sector	Price of building materials	Wage earnings and rates in construction	Average wages per employee in construction	Combined index, building materials[a] and wages[b]
		I	II	III	IV	V = (II + IV = 2)
Tunisia	63-73	3.87	(4.35)	-	7.45	(5.59)
Libya	67-70	14.86	(3.5)	-	14.22	(7.79)
Egypt	66-71	-2.28	2.06	3.36	1.10	1.68
Sierra Leone	66-73	2.07	(4.28)	1.13	-	2.12
Ghana	68-71	1.15	...	3.36	0.66	...
Zaire	68-72	6.90	7.75[c]	-	26.05	11.09
Zambia	65-72	8.87	4.25	12.55	13.99	8.15
Tanzania	66-72	5.75	(8.44)	0.44	1.55	5.68
Uganda	65-70	3.62	(0.99)	-	4.70	2.47
Kenya	64-73	5.59	(2.84)	10.68	7.95	4.88

Source: ECA, on the basis of table 6 in annex II and tables 1 and 2 in annex V.

a/ Weightings equal to 60 per cent for building materials and 40 per cent for wages have been assumed (IV).

b/ Average wage per employee in construction.

c/ 1970-1972.

NB.- Between brackets: Variations in the prices of cement column II and combined indices with cement (column V). For Tunisia, wholesale prices. For Libya, Sierra Leone and Ghana, total import price. For Uganda and Tanzania, import price from Kenya. For Kenya, export price.

134. Nevertheless, the possibility on the one hand of gathering information on this product on the basis of wholesale price statistics or, in their absence, foreign trade statistics, and on the other hand of assuming evolution for this product as an approximate average of building materials, means that it is conceptually considered more acceptable to use the price of cement combining it with the series on wages in the construction sector rather than to use these latter in isolation or another indicator as unsuitable as consumer prices.

135. Table 10 compares the annual rates of variation in the implicit price deflator index in the construction sector, prices of building materials and cement and wages for 10 African countries. Although the number of countries covered is low and the periods taken into consideration fairly short, one is led to the two following observations:

- The average wages per employee are closer to the implicit indices than the wage earnings and rates (three times out of four);
- The combined index of building materials and wages appears to adjust itself better to the implicit indices than the prices of building materials (or cement) or wages taken in isolation for four countries out of nine (Sierra Leone, Zambia, Tanzania and Kenya) and shows a small difference for two other countries (Tunisia and Uganda).

6. Implicit price deflator index for services, and consumer prices

136. The services sector occupies 37 per cent of the GDP of developing Africa. This sector is fairly heteroclite and at the present stage of information obliges us to undertake over-all deflation.

137. The heterogeneity of this sector is apparent from a comparison of the coefficients of variation of the implicit price deflator index of the subsectors with those of the sector taken as a whole (see table 12).

138. In terms of the average one may observe fairly small deviations between the implicit price deflator index of the subsectors and those of the sector (3.6 per cent maximum for trade).

139. However, rather substantial disparities appear at the subsector levels in each country. Overall the following observations may be made:

- Positive gaps of the trade subsector with the services sector appear in most countries except for Libya (-3.3 per cent) and secondarily for Tunisia and Zambia;

Table 11: Deviations between the implicit price deflator index of the subsectors and the service sector taken as a whole - Percentage variations (coefficients of variation of the implicit price deflator index of the services sector = 100)

Country and year		Trade	Finance, insurance, real estate and business services	Of which: dwellings occupied by the owners	Transport and Communication	Public administration	Other services[a]
Tunisia	60-73	-0.42	-3.74	-	-1.80	4.39	0.85
Libya	62-70	-3.29	6.04	6.78	-3.58	0.27	-1.97
Egypt	64-73	4.57	2.59	-	1.53	-0.36	-0.36
Sierra Leone	63-73	5.78	1.95	-	1.19	-7.17	-7.14
Liberia	64-73	0.35	9.83	9.29	-3.00	2.12	-3.31
Ghana	68-74	4.73	-4.00	-	-3.66	-1.84	3.37
Nigeria	60-73	10.82	-3.37	-	-3.47	-5.29	-3.37
Zaire	68-74	3.38	-15.37	-	-2.22	3.31	-15.37
Zambia	65-74	-0.68	4.84	-	5.14	2.51	4.48
Tanzania	64-74	7.42	3.04	2.90	-4.32	-4.75	-4.75
Uganda	60-71	3.47	5.68	1.07	-5.58	-8.39	9.17
Kenya	64-74	7.01	3.08	4.42	-2.00	-0.93	-5.24
Ethiopia	61-74	3.69	-1.03	-3.89	-6.71	-1.26	9.13
Average		3.60	0.74	-1.78	-2.04	-1.30	-1.08

[a] Community services, social services and personal services, producers of non-profit services to households, domestic services.

Source: ECA from Table 2 of annex II.

- Fairly large price fluctuations appear between countries in the finance, insurance, real estate and business services subsector reaching -15.4 per cent (for Zaire), + 9.8 per cent (for Liberia), even if in terms of the average the deviation is minimal: 0.74 per cent!

- The price deviations in the Transport and communication subsector with the services sector appear relatively slight and for 10 countries out of 13 they were lower than their implicit average. We had mentioned that the rates of variation in this subsector were unrealistic for most countries except perhaps for Zambia.

140. Concerning the Public administration and other services subsector, only three countries out of 13 apply the same implicit indices for these two subsectors (Egypt, Sierra Leone, Tanzania). For the other countries fairly marked deviations appear between their implicit indices reaching up to 17.6 per cent for Uganda. Moreover, the variations in these two indices were lower than the implicit index of the services sector for eight countries out of 13 (although these countries differ according to the subsector).

141. The transposition of indices in these various subsectors does not fail to raise problems: consumer prices data might for example provide a few indications on rents and transport.

142. However, without adjustment, it seems risky to transpose the price of the rent of a certain characteristic for the implicit price deflator index of the dwellings occupied by the owners which should take account of the intraregional variations and the elements of subsidy contained in their elements.

143. Moreover, the prices of transport and communication relate to a few modes of passenger transport (taxis, buses, sometimes railway) and exclude the most important at the national level, namely sea and air transport as well as data on freight. As for the tariff prices of a postage stamp, a telegram or a telephone call, they can in no way replace the preparation of special, more elaborate indices, failing which they would very poorly reflect the (evolution) of the implicit price deflator index of these sectors.

144. Statistics on wages are available for the Transport and communication subsector for 14 African countries of which five calculate data at constant prices. The transposition of the series on wages in the Transport and communication subsector also appears inopportune.

145. In view of the difficulties of detailed information in this field, the only choice remaining is simply to transpose the general consumer price index for the over-all implicit index of the services sector.

146. Table 8 in annex II provides the coefficients of variation in the implicit price deflator index in the services sector taken as a whole and consumer prices. The price deviations in terms of the average are lower than 3 per cent and this may be a justification for the transposition of the general consumer price index. However, in country terms not insignificant differences appear in the magnitude of the deviations as the following table shows:

Table 12: Magnitude of the deviations between consumer prices and the implicit price deflator index in the services sector

Deviations (per cent)	Country
-5 to 0	Libya, Ghana, Zambia
0 - 5	Tunisia, Sierra Leone, Kenya, Ethiopia
5 to 10	Egypt, Liberia, Zaire, Tanzania
10	Nigeria, Uganda

Source: ECA from Table 8 of annex II.

147. We observe in this table that seven countries out of 13 have deviations lower than 5 per cent and that the two countries which have deviations of over 10 per cent broadly use wages as a means of deflation in certain branches of the services. In sum, the differences in the weightings between these two indices, and the methodological procedures specific to each country in extrapolation and deflation particular to each branch of the services, are responsible for these deviations.

148. A priori it would appear possible to lessen the deviations by undertaking some refinements to the adjustment procedure.

149. Thus for example, for trade one might attempt a deflation of current values on the basis of wholesale prices, or of a combined index of consumer prices and wholesale prices. However, the data available for six African countries show that the average deviations for these two latter indices with the implicit price deflator index in this subsector are even greater than on the basis of the consumer price indices (2.79 per cent for wholesale prices and 1.35 per cent for the combined index as against only 0.02 per cent for consumer prices). Only two countries (Ghana and Zaire) provided a better approximation on the basis of a combined index and that does not in our view justify the need to use this procedure.

150. Similarly for the transport and communication subsector, one might be tempted to use instead of consumer prices the retail prices of petrol which are collected by most African countries, or the variations in sea cargo rates, or again a combined index of the two. Since the data have not yet been updated by ECA, it has not been possible to make a comparison in this field.

151. Finally, it would appear that a better over-all adjustment of the services sector would be provided by an index of consumer prices of services, excluding rent,[1] instead of the general index. Unfortunately very few African countries publish separate data for this category and recourse to over-all deflation of the services sector on the basis of the general index currently remains the only possible solution.

D. IMPLICIT PRICE DEFLATOR INDEX FOR GDP BY FINAL USE OF GOODS AND SERVICES

152. This very brief section is designed only to point out a few details which make it possible to check the consistency of the GDP adjustment index by kind of economic activity by taking position at the level of the over-all balance of goods and services.

153. Table 10 in annex II shows the comparison between the coefficients of variation of the implicit price deflator index of GDP by final use of goods and services for eight African countries, namely: Tunisia, Libya, Egypt, Liberia, Ghana, Zaire, Zambia and Kenya. The first observation called for concerns the magnitude of the deviations in prices between the various final uses of GDP. The latter is relatively lower than by kind of economic activity (see table 13), even if some variations between the various final uses with the implicit price deflator index of GDP appear substantial. Since our objective is less to compare the relative prices of the various final uses than to seek correspondence to these implicit indices, we will break down this table 13 in two ways:

154. Table 11 of annex II compares the deviations between implicit prices of final consumption and of gross capital formation with the consumer prices. Table 12 in annex II compares the implicit price deflator index of exports and imports of goods and services with the average values of external trade.

---

[1] It appears preferable to exclude rents not only because of the differences in weighting between the two approaches, but also because their variations in the consumer price index undergo distortion as a result of their control and decontrol and which consequently warp the over-all adjustment when rents are included.

Table 13: Deviations between the implicit price deflator index of GDP by final uses of goods and services and the total implicit price deflator index - Percentage variation (coefficients of variation of the implicit GDP price deflator index = 100)

Country and year		Final private consumption expenditure	Government final consumption expenditure	Gross fixed capital formation	Export of goods and services	Import of goods and services
Tunisia	60-74	-2.31	-3.90	1.68	15.58	4.53
Libya	62-70	-3.36	0.30	4.99	...	...
Egypt	64-73	0.79	-4.03	-1.49	-0.81	-1.09
Liberia	64-73	3.16	2.57	8.41	0.42	9.12
Ghana	68-74	-1.90	-12.49	-1.48	6.51	-3.82
Zaire	68-74	11.35	9.07	-3.72	-1.59	3.63
Zambia	65-74	8.28	5.95	11.18	4.30	25.18
Kenya	64-74	8.23	-0.19	8.43	8.51	20.48
Averages		3.03	-1.62	3.50	5.08	8.55

Source: Table 10 of annex II.

1. Implicit price deflator index for final consumption expenditure (FC) and gross capital formation (GCF) and consumer prices

155. Table 11 of annex II shows that the coefficients of variation between these two categories of index are fairly low for the eight countries, the average of consumer prices differs by barely 1 per cent from the implicit indices of this aggregated category. For five countries (Tunisia, Libya, Liberia, Zaire and Zambia) the deviations do not exceed ± 3 per cent and for three countries (Egypt, Ghana and Zambia) the gaps are roughly of the order of ± 6 per cent.

156. Although methodological differences exist concerning the method of calculation of the constant price data depending on the various uses of final consumption and gross fixed capital formation,[1] and for each use taken in isolation, this comparison with the following one permits practical transpositions to check the consistency of the adjustments by kind of economic activity.

---

[1] ECA used for the 1970s deflation of Gross fixed capital formation on the basis of the indices of import prices of transport machinery and equipment (Section 7 of the three-digit = SITC).

2. Implicit price deflator index for exports and imports of goods and services and unit values of external trade

157. Table 12 of annex II shows that for almost all the countries (except for Tunisia for exports and Zambia for imports) the rather striking correspondence between these two categories of index reflects the fairly general method of adjstment of exports and imports of goods and services with the help of the respective indices of the average unit values of external trade.

158. Although a better refinement of the adjustment is to consider non-factor services separately, the difficulty of isolating this catetory for most African countries and the methodological problems posed by their adjustment lead us to prefer the over-all adjustment on the basis of average unit values of external trade.

E. GENERAL OBSERVATIONS ON THE IMPLICIT DEFLATOR INDICES

1. Differences between implicit deflator indices and analytic price indices

159. This exercise on the empirical relations between implicit deflator indices and analytic price indices enabled us to observe sometimes substantial differences between the two indices. We can group these differences under three main headings.[1]

(a) Index formulae

160. The breakdown of the data in current values into a component of quantity and price indices calls for the preparation of formulae which meet conditions such as the product of quantity indices by price indices equals their value ratio. This implies that if the quantity index is of the Laspeyres type, the price index must necessarily be of the Paasche type. However, for analytical purposes, preference is often given to the price indices of the Laspeyres type, as the Paasche-type indices are less easy to interpret and, in the absence of weighting on the basis of current values, more difficult to gather at frequent intervals.

(b) System of price evaluation

161. The analytic price indices should express the changes in prices actually paid or received. Price deflator indices should express the changes in prices for which goods and services in the aggregate in question are evaluated. This problem is important in countries which subsidize consumer products (for example, Egypt) and more particularly housing. For the deflation of the aggregates, it is the cost including the subsidy which is the relevant price since it is the price at which the aggregate is evaluated.

---

[1] See in this regard a system of quantity and price statistics, UN ST/ESA/STAT/ UN ST/ESA/STAT/73 of 24 February 1975.

(c) Weightings

162. For the analytic price indices, or at least for some of them, weighting should be carried out on the basis of quantities sold or bought. In the case of price deflator indices, non-marketed quantities (in particular production for own account, wages in kind and dwellings occupied by the owners) should be taken into account since in the aggregates to be deflated, these quantities are included.

2. Deflator indices used by ECA

163. National differences between analytic price indices and price deflator indices are amplified at the level of ECA when ECA applies deflation of the variations in value to the representative aggregates of economic activity as a whole for the African countries on the basis of analytic price indices which are available or calculated. The implicit price indices obtained sometimes run the risk of giving an inaccurate picture of the movement of prices.

164. On the basis of the empirical analysis above, an attempt may be made to bring out a certain provisional practical methodology. However, two pertinent facts may be emphasized:

(i) The first is that ECA gathered information on agricultural producer prices in the 1960s, in particular on the basis of economic accounts.[1] Nevertheless, the work was not continued for several reasons: lack of personnel; difficulties in estimating the producer prices for the missing years which sometimes cover a very long period because it is linked to the occasional preparation of economic accounts; problems raised in the preparation of the indices following inadequate product coverage (particularly livestock raising, fisheries and forestry), although some information on agricultural crops is eventually gathered;

(ii) The second fact is that ECA regularly publishes national accounts data and estimates according to two price evaluation systems: for GDP by kind of economic activity the values are given at factor cost: for GDP by final use of goods and services, the values are given in market prices (purchasers' values).

/...

---

[1] A preliminary study of quantities and unit values of agricultural commodities at producer prices used in the compilation of national accounts in Africa, E/CN.14/NAC/35 of 29 September 1969.

165. Classification according to the first approach still remains broadly dependent on the former SNA. In anticipation of a subsequent change, following the new SNA which introduces changes not only in the classification but also in the price evaluation system, since prices are evaluated at the producer price and not at factor cost, it seems preferable to apply the following transitional procedure:

- Deflation of current values of GDP by final uses of goods and services, especially as we have noted better relations between implicit deflator indices and analytic price indices;
- Obtaining, by carry-over,[1] the implicit deflator index for GDP by kind of economic activity, and once the more or less correlative price indices are divided up by sector, establishment of that for agriculture by balance;
- By comparing the implicit index of agricultural prices obtained with a few items of information available on the producer prices in the country (or even those of the neighbouring countries) and sometimes even the consumer food price index, effecting an adjustment of balance by allocating the balance if necessary into a few services subsectors (a positive increase can be added to the trade subsector and a negative increase can be subtracted from the other services), or correcting if required the adjustment index of the total GDP.

166. In conclusion the deflator indices used by ECA for the subsectors will provisionally remain the following:

- For mining, export price of mining products;
- For manufacturing plus electricity, gas and water, over-all import price less crude petroleum and cereals;
- For construction, price indices of building materials or, in their absence, price of cement, combined with average wages in the subsector;
- For the services sector, taken as a whole, consumer price indices with adjustments if necessary for a few subsectors;
- For agriculture index obtained by balance (total GDP - other subsectors) with adjustments if necessary.

---

[1] In the absence of available data for most African countries on the rates of indirect taxation to deflate indirect taxes net of subsidies, ECA has been unable to deflate this aggregate thus causing distortions between implicit price deflator index of GDP by kind of economic activity and GDP by final uses of goods and services for the countries in question. Research is under way to achieve a practical method of deflating indirect taxes net of subsidies.

PART III: MOVEMENT OF SOME ANALYTIC PRICE INDICES AND WAGE INDICES IN AFRICA

A. INTRODUCTION: OVER-ALL STRUCTURE OF THE PRICES AND WAGES PATTERN

167. The implicit price deflator index does not always have a précise economic meaning and the movement of prices cannot be analysed without recourse to analytic indices of prices and wages.

168. Variations in these prices arise from complex factors. However, let us say for the sake of simplification that two predominant influences affect price levels in Africa (see table 14):

- The world market;
- The role of the State.

The pure "constraints" which appear are the external trade prices. The essential weapons of economic policy are the fixing of producer prices and minimum wages: the State determines thereby simultaneously and at the same time the size of the amount thus deducted from the economy (commercial margins being supposed to be stable in relative terms) and the essential factors of household incomes.

169. In a certain way, the amount deducted may appear to be a constraint to the extent that it constitutes an important element of public revenue, as increases in it must be linked to the development of recurrent expenditure and investment objectives in the medium term.

170. But a constraint of a different kind appears concurrently, the development of household purchasing power in relative terms (for example, quantity of domestic or imported consumer goods equivalent to one hour of labour).

171. In order to place the movement of prices in its over-all context,[1] it is necessary to supplement the analysis of the implicit price deflator index by analysis of a few indices of analytic prices and of wages, the most relevant of which are:

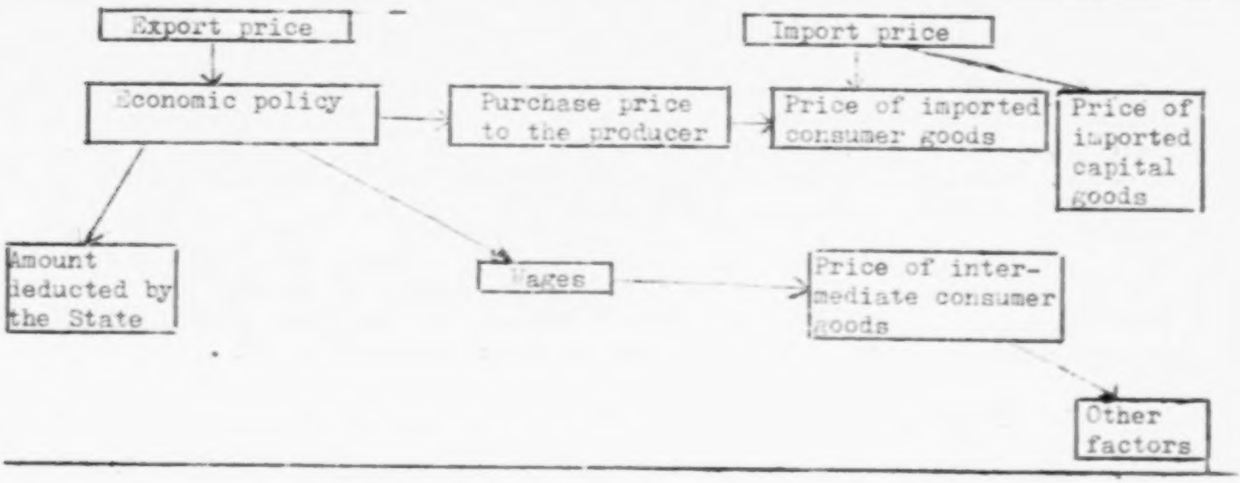
- Consumer prices;
- Wholesale or producer prices;
- Average wages;
- Unit values of external trade.

172. Furthermore, it is necessary to seek as far as possible the relations and influences which these prices exert on the levels of implicit price deflator indices by sector.

---

[1] As mentioned in the introduction, we will avoid seeking relationships with economic variables.

Table 14: Over-all structure of the pattern of prices and wages


Export price
Import price
Economic policy
Purchase price to the producer
Price of imported consumer goods
Price of imported capital goods
Amount deducted by the State
Wages
Price of intermediate consumer goods
Other factors

Source: STATECO, Bulletin de liaison, INSEE, juin 1977n n° 12 (example of Togo).

Notations:

——→ : The rise of one price has repercussions on the following one.

- - - -→ : Decision of economic policy (fixing of producer prices and thus simultaneously of the contribution of agriculture and mining; fixing of minimum wages price controls

←——→ : Implicit consequences of the previous decisions on the purchasing power of the hourly wage rate or a unit quantity of a commodity destined for export.

B. CONSUMER PRICES IN AFRICAN COUNTRIES

1. Brief description of the consumer price indices[1]

(a) Purpose of the index

173. A consumer price index is an instrument used to measure the development of the cost of living, the purchasing power of wage earners and other revenues of the population as well as inflationary and deflationary pressures.

---

[1] For more detail refer in particular to the 1972 Supplement to the Statistical Yearbook and the Monthly Bulletin of Statistics, Methodology and Definitions, United Nations 1974, ST/ESA/STAT/SER.S/Suppl.1. National Practices in compiling Price and Quantity Index Number. ST/ESA/STAT/74, 5 February 1975.

(b) Scope of the index (table 5)

174. Most African countries publish these indices monthly except for a few countries which publish these indices on a quarterly basis (Sierra Leone, Lesotho, Southern Rhodesia, Uganda, Tanzania and Republic of Djibouti).

175. While in a number of developed countries the coverage of these indices refers to the whole country, in Africa only two countries (Tunisia and Mauritius) cover the national territory and 10 countries (Egypt, Morocco, Algeria, Botswana, Lesotho, Zambia, Southern Rhodesia, Tanzania, Malawi and South Africa) a group of urban centres.

176. All African countries except four (Benin, Guinea, Equatorial Guinea and Namibia) have consumer price indices. It should be pointed out that four countries (Congo, Central African Empire, Djibouti and South Africa) gather consumer price indices for the European population only.

(c) Products

177. The number of products included in the consumer price indices is often limited[1] and sometimes hardly if at all representative of consumption in African households.

178. Some countries exclude from the field of the study a few important products such as alcoholic beverages (example, Tunisia - former cost-of-living index), educational and transport expenses in the case of the Congo, clothing in the case of Cape Verde and even rent in 10 or so African countries.

179. Furthermore, some African consumer price indices include products which are not regarded as goods and services in the national accounts: example, such products are direct taxes (Upper Volta), contributions to charity and gifts to other households.

(d) Classification

180. SNA proposes in table 6.1 the scheme to be used to classify the outlays on goods and services which households make in the domestic market, according to the major object (i.e., the purpose) for which the goods and services are acquired. A previous study by ECA[2] shows differences with the classification used by some African countries, particularly for those which have an old weighting base.

---

[1] See interim studies on purchasing power parity in Africa, *Statistical and Economic Information Bulletin*, No.3 and 5, ECA.

[2] See interim study on purchasing power parity in Africa, *Statistical and Economic Information Bulletin*, issues 3 and 5, ECA.

181. Classifications useful for the analysis of the various price movements are those which relate to geographical areas and socio-professional categories. Furthermore, distinctions should be made to isolate products subject to seasonal fluctuations (example, fruit and vegetables) and goods and services subject to price controls (example, cereals, rent) in order to make it possible to interpret better certain changes in the indices. Lastly, a useful classification would be to differentiate local products and imported products and, similarly, it would be useful to distinguish physical production (with food products, electricity, gas and water separately) and services (with rent separately).

(e) Weightings, base periods and formulae

182. The weightings used for the consumer price indices are derived from household budget surveys which are designed to gather data on income distribution, consumption and savings. These surveys in Africa are often limited to a few groups within the population, mainly because of the lack of resources. In addition, certain surveys are old and date from the beginning of the 1960s and even before (example, Central African Empire, Upper Volta). Finally, it should be recalled that the Laspeyres formula is almost the only one used in African countries to prepare consumer price indices.

2. Consumer price movements throughout the world

183. Table 1 in annex III drawn from the monthly IMF publication, International Financial Statistics, gives trends in weighted consumer price indices by major regions of the world. Table 16 enables us to distinguish in outline two major periods for most of the regions of the world except Latin America.

- A period from 1960 to 1972 of gradual acceleration of the rise in prices but in which inflation rates remain relatively low (between 5 and 10 per cent);

- A period from 1973 to 1975 and beyond, characterized by a sharp rise in prices (more than 10 per cent) for all the regions of the world which may accordingly be described as world inflation.

184. Without entering into theoretical explanations of the causes of this inflation, it is nevertheless necessary to mention the major factors in its origin: it is clear that the roots of the current inflation are to be found in the monetary and fiscal expansion of the industrialized countries which began between 1970 and 1972: this produced a sharp increase in industrial output between 1971 and 1973 accompanied by rapid rises in the prices of primary commodities between 1971 and 1974, which, in turn, caused a sharp rise in consumer prices beginning in 1972.[1]

1/ Marcus Fleming, International aspects of inflation, IMF. 1975.

Table 15: Recent typology of consumer price indices in African countries

Scope of the index	Types of population	Household income groups	Composition of the index (whether or not rent included)	Country
National	Africans	Low income	X	**Mauritius**
		Middle incomes	X	Tunisia (publication Tunis)
Urban centres	Africans	All incomes	X	Egypt [major representative urban centres]
		Low incomes	X	Morocco [8], Algeria [31], Botswana [6], Lesotho [6]
			X	Zambia [5], Southern Rhodesia [4], Tanzania [all urban centres]
			–	Malawi [6]
		Middle incomes	X	(Botswana [6])
		High incomes	X	(Botswana [6])
	Europeans	Low incomes	X	South Africa [11]
Capitals or Agglomerations	Africans	All incomes	X	**Algeria,** Togo,
			X	Gabon, Zaire, Mozambique, Reunion,
			–	Niger, Madagascar, Cape Verde,1/, Mali2/
			X	Ivory Coast, Madagascar, Sierra Leone, Liberia, Nigeria, Gambia, Seychelles, Libya, Ghana, Senegal, Nigeria
			–	Swaziland, Uganda, Ethiopia
		State employees	X	Burundi
			–	(Sudan before 1969)
		Middle incomes	–	Sudan, Cameroon, Kenya, Somalia
			–	–
		High incomes	X	(Malawi), (Swaziland)
			–	Chad
	Europeans	High incomes	X	....
		High incomes	–	Congo, Central African Empire, Mauritania, before 1974, (Burundi)
Countries with no retail price index				Benin, Guinea, Equatorial Guinea, Namibia
Methodology of the index not available at ECA				Djibouti, Comoros, Sao Tome and Principe, Guinea Bissau, Rwanda, Angola, Mauritania as from 1974.

Conventional signs : X = Rents included.

[ ] = Number of urban centres.

– = Excluding rent

( ) = Indices in existence but not taken into account in Annex III

Source: ECA from Technical Guide 1970, 1973, 1976, Vol. 1 Consumer Prices, ILO and national sources.

Notes : 1/ Excluding clothing.

2/ Food products only.

Table 16: Weighted increase in consumer prices by major regions of the world

Regions	1960-1975	1960-1972	1973-1975
World	6.3	4.9	12.6
Industrialized countries	4.9	3.6	10.3
Other European countries	8.8	6.9	16.6
Australia, New Zealand, South Africa	5.1	3.3	12.5
Developing countries	14.8	11.6	28.8
Oil-exporting countries	7.3	5.6	14.1
Other countries, western hemisphere	24.8	21.1	40.9
Other countries, Middle East	6.8	4.4	17.2
Other countries, Asia	8.7	6.5	18.1
Other countries, Africa	6.5	4.4	15.2

Source: ECA, from International Financial Statistics; IMF, Annual Data 1951-1975, May and April 1977. (see table 1 in annex 3).

3. Consumer price movements in Africa

185. Table 16 above shows that the weighted increase in prices in Africa between 1960 and 1972 was relatively small and lower than that in the industrialized countries (4.4 per cent compared with 4.9 per cent). As from this period the inflation rate becomes higher (15.2 per cent compared with 10.3 per cent), stabilizing at dangerously high levels for the economies of African countries (18 per cent on average for 1974 and 1975). We will distinguish in turn the movement of prices by product category and by geographical region.

(a) Consumer price movements by country

186. Table 17 gives the frequency distribution of African countries on the basis of consumer price increases between 1960 and 1975. Over this period three groups of countries may be identified:

Table 17: Frequency distribution of African countries on the basis of consumer price increases between 1960 and 1975

Intensity of inflation (Average annual rate - per cent)	Country	Frequency No. of countries	%
2.-3.9	Morocco, Algeria, (Guinea Bissau), Southern Rhodesia	4	7
4.-5.9	Tunisia, Libya, Egypt, Ivory Coast, Upper Volta, Benin, Niger, Gambia, Guinea, Sierra Leone, Liberia, Togo, Congo, Sao Tome, South Africa, Namibia, Botswana, Lesotho, Swaziland, Zambia, Malawi, Mozambique, Madagascar, Comoros, Reunion, Mauritius, Tanzania, Kenya, Somalia, Djibouti, Ethiopia	31	58
6.-7.9	Sudan, Mauritania, Senegal, Mali, Nigeria, Cameroon, Chad, Central African Empire, Equatorial Guinea, Angola, Seychelles	11	21
8.-9.9	Cape Verde, Gabon, Burundi,	3	6
10.-11.9	Ghana, Rwanda, Uganda	3	6
12	Zaire (25.6 per cent)	1	2
Total		53	100

Source: ECA from table 2 in annex III.

- A first group of countries characterized by a fairly low long-term inflation rate (between 2 and 4 per cent). These are Morocco, Algeria, Southern Rhodesia and probably Guinea-Bissau;

- A second group of countries characterized by a very high long-term inflation rate of over 10 per cent. These are Zaire (25.6 per cent), Ghana, Rwanda and Uganda (between 10 and 12 per cent);

- A third group of countries covering almost all African countries, about 80 per cent, characterized by a relatively moderate long-term inflation rate (between 4 and 8 per cent).

187. However, these long-term inflation rate trends conceal fairly large disparities depending on the periods taken into account and in this regard it is necessary to distinguish between the inflation rates before and after 1972 by using 1973 as cut-off year.

188. For the period covering 1960 to 1972, it may be observed that almost all African countries, 89 per cent of the total, fall into the group of rates below 5 per cent; only five countries experience inflation rates between 5 and 10 per cent (Ghana, Central African Empire, Gabon, Rwanda, Burundi) and only one higher than 10 per cent (Zaire = 26 per cent).

189. As a result this period is characterized by relatively low inflation except for Zaire which experienced disruption of its economic system following the political disorder after 1960.

190. A few pertinent facts for this period may be mentioned:[1]

- The independence of the French-speaking African countries in 1960 was accompanied for a few countries by a substantial rise in prices in 1961: Gabon (56.6 per cent), Upper Volta (18.7 per cent), Ivory Coast (10.9 per cent). The same was true from 1960 to 1965 for Rwanda and Burundi (of the order of 15.8 per cent).

- The price rises in Ghana in 1964 and 1965 (respectively 12.0 and 25.9 per cent) are attributable to the increase in import taxes, the shortage of imported consumer goods and an inadequate distribution system, especially for local products.

- The exceptional rise in prices in Somalia in 1964 and 1965 (respectively 13.0 and 13.3 per cent) is linked with the drought during this period.

- The exceptional rise in prices in the Sudan in 1967 (11.3 per cent) is due to the introduction of import licences and exchange controls, while for 1969 (12.5 per cent) it arises more particularly from the increase in wages in the public sector, poor harvests (especially of durrah) and an increase in import taxes.

191. The period covering 1973-1975 is marked by serious inflation for 42 countries out of 53 (more than three quarters of the total) with rates of over 20 per cent for seven countries (Sudan, Cape Verde, Ghana, Zaire, Rwanda, Seychelles, Uganda).

---

[1] Origins and development of inflationary trends in African countries, Central Bank of Nigeria, Research Department, document submitted to the Seminar of the Association of African Central Banks in Addis Ababa from 5 to 16 August 1974.

192. Only 11 countries were able to hold inflation within reasonable limits (between 5 and 10 per cent): Morocco, Algeria, Tunisia, Libya, Egypt, Congo, Zambia, Southern Rhodesia, Mozambique and Ethiopia.

193. Although the current inflation is characterized by its "world-wide" nature, the factors which have affected prices in Africa are as much exogenous as endogenous.

194. During this period the rise in import prices in developing Africa averaged 19.3 per cent annually compared with 15.2 per cent for consumer prices. Although there was probably a degree of cause and effect involved it does not seem that world economic conditions were responsible alone for the high degree of inflation in Africa.

195. Moreover, the maximum amount of inflation which can be attributed to the rise in oil prices since 1973 is about 1.5 per cent a year, which is the case in the most seriously affected country, namely Kenya (cost of oil imports as a percentage of GDP in 1975 = 8.7 per cent). For other countries, the inflation rate due to the oil price increase is normally below 1 per cent.[1] Even if the rate seems fairly low, it is none the less necessary to seek the key factors on the endogenous side and principally in fiscal and monetary policies.

196. The practice of deficit financing has become widespread particularly in the poorest countries and in the countries most seriously affected by the recent downturn in the world economy.

197. In addition, recourse to borrowing from banks has become excessive and has been the principal factor in the phenomenal acceleration of monetary expansion during recent years, which has had serious repercussions on the level of prices.[2]

198. Lastly, substantial wage rises to maintain purchasing power have contributed to the cumulative process of price rises in certain countries (see the section on average wages).

199. However, despite the monetary expansion, some countries were in a position to ensure supplies by increasing imports. This applies to the oil and phosphate producers (Morocco), but also to Egypt (+25.7 per cent in 1974), or by dipping into their foreign exchange reserves, as was the case for Zambia (from 193 million at the end of 1973, they fell to 149 at the end of 1975), by imposing a degree of self-discipline in balance-of-payments matters (in Ethiopia).

1/ ECA, *Survey of Economic Conditions in Africa in 1975*. Part I, *Inflation in African countries.*

2/ ECA, *Survey of Economic Conditions in Africa*, 1976, Part I, table 1-9-3, page 134.

Table 18: Frequency distribution of African countries on the basis of the rise in consumer prices between 1960 and 1975

1960 - 1972			1973-1975				
Low inflation (below 5 per cent)	Moderate inflation (between 5 and 10 per cent)	High inflation (over 10 per cent)	Low inflation (below 5 per cent)	Moderate inflation (between 5 and 10 per cent)	High inflation (between 10 and 15 per cent)	Rate between 15 and 20 per cent	Rate over 20 per cent
Morocco, Algeria, Tunisia, Libya, Egypt, Sudan, Mauritania, Senegal, Mali, Ivory Coast, Upper Volta, Benin, Niger, Cape Verde, Guinea, Guinea Bissau, Sierra Leone, Liberia, Togo, Nigeria, Cameroon, Chad, Congo, Equatorial Guinea, Sao Tome and principe, Angola South Africa, Namibia, Botswana, Lesotho, Swaziland, Zambia, Southern Rhodesia, Malawi, Mozambique, Madagascar, Comoros, Reunion, Mauritius, Seychelles, Tanzania, Uganda, Kenya, Somalia, Djibouti, Ethiopia	Ghana, Central African Empire, Gabon, Rwanda, Burundi	Zaire (26.0)	–	Morocco, Algeria, Tunisia, Libya, Egypt, Niger, Congo, Zambia, Southern Rhodesia, Mozambique, Ethiopia	Mauritania, Mali, Ivory Coast, Upper Volta, Benin, Gambia, Guinea, Guinea Bissau, Sierra Leone, Togo, Cameroon, Gabon, Chad, Central African Empire, Equatorial Guinea, Burundi, South Africa, Namibia, Botswana, Lesotho, Lesotho, Swaziland, Malawi, Madagascar, Reunion, Somalia, Djibouti	Senegal, Liberia, Nigeria Sao Tome and Principe, Angola, Comoros, Mauritius, Tanzania, Kenya	Sudan, Cape Verde, Ghana, Zaire, Rwanda, Seychelles, Uganda, (35.7)

Source: ECA from table 2 of annex III.

200. As for the countries which have experienced inflation rates higher than 20 per cent, in addition to factors mentioned above, a few specific points should be mentioned: in Uganda, the inflationary spiral (+35.7 per cent between 1973 and 1975) is due in large part to the conjunction of an increase in the money supply and domestic credit with a marked fall in output.

201. In the Sudan, (26.1 per cent in 1974 and 24 per cent in 1975), mention should be made more particularly of the increase in import taxes combined with the high level of protection of young industries with low productivity.

202. In Rwanda, the uncontrollable proliferation of the tertiary sector and the speculative inclinations of traders are largely responsible for the galloping inflation of 1973 to 1975 (30.6 per cent as an annual average).

203. As for Zaire, the inflationary progress which has become established since 1974 (28.3 per cent of price rises in 1974 and 27.6 per cent in 1975) seems to derive not only from the increase in the money supply and domestic credit but also from regulations such as price controls and allocative rationing.[1] To these transitory factors are added other elements linked to the structures of the Zairian economy, namely deficiencies in the transport infrastructure and existence in the distribution channels of a multitude of commercial middlemen.[2]

(b) Consumer price movements by product

204. The classification of prices of products according to the classification of household final consumption expenditure by function (SNA, table 6.1) seems desirable. Unfortunately the data published in this field use composite groups which do not overlap easily for the purposes of comparison.

205. As a result we have used the conventional classification used by the International Labour Office,[3] namely:

A - Total
B - Food products
C - Fuel and lighting
D - Clothing
E - Rent

---

[1] ECA, Survey of Economic Conditions in Africa, 1975, Part I: Inflation in Africa: a case study.

[2] Banque du Zaire, Rapport annuel 1975.

[3] International Labour Office, Year Book of Labour Statistics, 1970 and 197

Table 19 below gives the frequency distribution of the deviations between the average annual rises in consumer prices by product category and those of the total index for given periods.

206. (i) The first category of products is composed of food products. The weighting of these products in the total index exceeds 50 per cent for two thirds of the countries (26 out of 38); as a result it is natural that the range of prices is small. The price gaps between these products and the general index fall within a fairly narrow range: between -1 and +1 per cent for three quarters of the countries (33 out of 44).

(ii) The second category of products is made up of fuel and lighting. The average weighting of these products in the total index is 6.5 per cent (29 countries). This category of products has a wider range of prices but nevertheless remains fairly concentrated. The price deviations between these products and the general index vary between 0 to -3 per cent for 59 per cent of the countries, while the negative deviations concern 61 per cent of the countries. This reflects the fact that this subsector is technologically modern in most of the countries and has fairly high productivity which permits price rises lower than other product categories and even sometimes substantial falls in prices for certain periods.

(iii) The third category of product is composed of clothing. The average weighting of this group is 9.4 per cent (40 countries). The price differences are very marked; nevertheless, for 57 per cent of the countries, these price deviations compared with the total index remain between 0 and 2 per cent. These positive deviations appear to result, at least for a number of countries concerned, from the fairly substantial price rises arising from the local textile substitution industries with rather high protective customs tariffs and rather low output. Nevertheless, more detailed information concerning the composition of the specific products contained in the Clothing group and their distribution as between local products and imported products would provide more meaningful explanations.

(iv) Finally, the last category relates to rent. The weighting of this group in the total varies between 3.4 per cent (Gabon) and 18 per cent (Tunisia). The range of prices in this category, although substantial, is nevertheless lower than the Clothing group. The trend which emerges from the 25 countries including this category in their over-all index is that, for 68 per cent of them, the deviations are negative compared with the over-all index. The fact that many rents are subject to control and that some of them are barely representative in reflecting the real variation in prices, largely explains the fairly large negative deviations (20 per cent of the countries have negative deviations of over -5 per cent).

Table 19: Frequency distribution of the deviations between consumer price index by product category and over-all index. Annual percentage variation

Over-all index = 100

Annual deviations (%)	Food	Fuel and lighting	Clothing	Rent	Percentage distribution (%)
to -5	1	3	3	5	8.5
-4 to -4.9	-	1	-	1	1.4
-3 to -3.9	-	3	4	2	6.3
-2 to -2.9	-	11	4	5	14.1
-1 to -1.9	2	5	1	2	7.0
-0 to -0.9	3	3	7	4	12.0
0 to +0.9	13	3	7	2	24.6
+1 to +1.9	10	1	6	-	12.0
+2 to++2.9	2	1	2	-	3.5
+3 to +3.9	1	-	1	1	2.1
+4 to +4.9	-	-	-	-	-
to +5.0	2	1	6	3	8.5
Total (number of indices)	44	32	35	25	100.0

Source: ECA from table 3 in annex III.

(c) Consumer price movements by geographical region

207. The major short-coming of African consumer price indices is coverage limited to the capital and the data which appear for some countries do not seem to grasp the full scope of the real deviations which would emerge for a few largely unintegrated African countries. We will select the examples of two African countries which have fairly long consumer price series: Mauritius and Nigeria.

208. Mauritius is the only African country which regularly publishes data on consumer prices (with 1962 as base year) covering rural and urban regions. As a result of a fairly small national territory and fairly high economic integration compared with the other African countries, the deviations in the consumer price indices for the rural and urban regions appear very small (0.3 per cent as an annual average between 1962 and 1975), and provide no valid indication of the deviations which might appear in this field in other African countries.

209. Nigeria regularly publishes data on consumer prices for the capital Lagos and for certain other cities such as Ibadan, Benin, Enugu, Port Harcourt, Kaduna, Ilorin, Sokoto/Gusau and Kano, with 1953, 1957, 1960 and 1964/65 as bases. In terms of the annual average between 1964 and 1975, the maximum deviation with Lagos relates to Benin with a difference of +1.6 per cent for the over-all index and +1.8 per cent for the food products index. It should be pointed out in this regard that the representative products in the various urban indices vary from one city to another and thus distort the comparison.

210. These fragmentary data do not at the present time permit a valid adjustment of the consumer price index to cover the whole country and the only practical solution is to use the consumer price index of the capital as an expression of the variation in retail prices for the country as a whole.

C. WHOLESALE OR PRODUCER PRICES

1. Brief description of the wholesale or producer price indices[1/]

(a) Purpose of the index

211. The wholesale price indices are instruments used to measure variations in prices and detect the inception of inflationary and deflationary pressures. By wholesale prices are to be understood prices applied for transactions on large quantities (it is not a question of prices paid or obtained by wholesalers).

212. It should be mentioned that the differences in designation between wholesale prices and producer prices do not arise from an absolute rule and are not the same for all countries. Thus Algeria prefers the term "industrial producer price", while Morocco and Zambia keep to the traditional designation of "wholesale prices", while their indices are more or less similar.

(b) Scope of the index

213. In Africa 18 countries calculate wholesale price indices, seven countries calculate partial indices of building materials which are included in their over-all wholesale price index (Morocco, Algeria, Egypt, Sudan, Zaire, Zambia and South Africa), while three countries have only a building materials index (Senegal, Ivory Coast, Southern Rhodesia).

214. The categories of goods, such as heavy equipment, ships, aircraft and other complex or unique goods, are excluded from the scope of the index since it is difficult to obtain comparable series on these goods.

[1/] For more details refer in particular to the 1972 Supplement to the Statistical Yearbook and the Monthly Bulletin of Statistics - Methodology and Definitions, United Nations 1974, ST/ESA/STAT/SER.5/Suppl.1, and to the National Practice in Compiling Prices and Quantity Index Numbers. United Nations, ST/ESA/STAT/74 of 5 February 1975.

215. In addition, goods subject to substantial seasonal fluctuations (example, fruit and vegetables) and products which are not the subject of an actual transaction (example, food products consumed by the producer) are not represented in the index.

216. Finally, the coverage of the wholesale price indices is practically national for five countries (Algeria, Tunisia, Ghana, South African and Zaire), urban for two countries (Egypt: Cairo and Alexandria - Gabon: Libreville and Port Gentil) and relates to the capital alone for the remainder of the countries (11).

Table 20: Systems of evaluation in the wholesale or producer price indices of some African countries

Producers' sales price	Wholesalers' sales price	Import price		Export price
		Sales price	On c..i.f. basis	On f.o.b. basis
Morocco, Algeria	Morocco, Algeria	Morocco	Algeria	Tunisia
Tunisia, Ghana 1/	Tunisia, Egypt	South Africa	Ghana 4/	Ghana 4/
Gabon	Central African Empire, Gabon	Zambia	Gabon	
Congo, South Africa, Zambia	South Africa, 2/ Zambia, Ethiopia 3/			

Source: National practices in compiling price and quantity index numbers United Nations, ST/ESA/STAT/74, 5 February 1975.

Notes: 1/ Tobacco, beverages, furniture, etc.

2/ For a few products only.

3/ For imported and exported products.

4/ Unit value.

(c) Price evaluation systems

217. It is customary to set apart the following different stages of wholesale prices:

- Producers' sales price (producer price)
- Producers' purchase price (intermediate consumption, gross fixed capital formation)
- Purchase price of wholesalers or similar
- Sales price of wholesalers

- Purchase price of retailers
- Import price (several price levels)
- Export price

218. In principle the wholesale price statistics relate to the prices of actual transactions (which take account of reductions, discounts and refunds). In practice, the transactions are rarely effected for cash, which distorts the price of the catalogue sometimes used (example, Egypt) since in these circumstances no account is taken of the cost of borrowing money. In addition, the price covers only the costs up to departure from the seller (producer - importer, etc.) and does not include the transport costs to the extent that they are part of the first stage of the transaction, nor insurance or installation costs, if appropriate.

219. Two sales price levels are distinguished at the first stage of the transaction: the price including excise, sales and similar indirect taxes and the price excluding tax. This latter case is used in Egypt. Each type of price has different uses, but it is preferred to ask for prices excluding tax and net taxes (deduction of subsidies) by product, in order to estimate the prices excluding taxes at the other stages of marketing, where prices including all taxes are generally asked for, as they are easier to grasp at the level of the stages of marketing. On the other hand, the purchasers' prices include all costs incurred until the stage of use (user).

(d) Classification of the various price evaluation systems

220. The method most widely followed to date consisted in the calculation of various partial indices on the basis of the series of wholesale prices relating to the known categories of goods (traditional approach). However, since some years[1] attempts have been made to prepare indices by means of which it is possible to measure the movements of prices of goods in terms of the flows among the various economic sectors (sector approach) and which serve better as GDP deflator indices (see table 21).

221. The principal difference between the traditional approach and the sector approach lies in the classification adopted:

- In the traditional approach, the classification selected is that relating to the composition and to the physical characteristics and degree of processing of the products distinguishing for example between sectors of productive activity (industry, agriculture);

---

[1] See the recommendations contained in the Collection and Compilation of price and quantity series, E/CN.3/402 of 4 July 1969.

Table 21: Typology of wholesale price indices on the basis of classification used

Scope of the index	TYPES OF CLASSIFICATION					
	By type of product	By degree of processing	By final use	By type of economic activity	By geographical origin	Others
National	Tunisia, Algeria, South Africa, Ghana	–	Zambia, (goods used locally)	Algeria, Zambia, South Africa	Tunisia, South Africa	
Urban centres	Egypt, Gabon	Egypt	Egypt	Egypt	Gabon	
Capitals	Morocco (index base 39 = 100), Sudan, Central African Empire, Congo, Zaire (not weighted)	–		Morocco (Pna) (index base 65 = 100)	Morocco (index base 39 = 100)	Ethiopia, sale of: – Local products exported by wholesalers, – sale of imported products by wholesalers

Source: ECA from: National practices in compiling price and quantity index numbers, United Nations, V.ST/ESA/STAT/74 of 5 February 1975.

Monthly Bulletin of Statistics. Methodology and definitions, United Nations ST/ESA/STAT/SERS/Suppl. 1, 1974, National publications for Morocco, Gabon and Zambia.

Notes: Pna: Publication not available at ECA.

- As for the sector approach, the classifications are based on the type of industrial activity of the producers, on the economic origin (domestic production and imports) and the destination of the products (intermediate consumption, final consumption, gross fixed capital formation and exports).

(e) Weightings, base periods, formulae

222. The sources of weighting of the wholesale price indices are generally industrial or wholesale trade surveys and sometimes agricultural statistics and external trade statistics.

223. Ghana and Morocco have used data based on household budget surveys, Morocco from national accounts estimates for the new index 65 = 100, and the Central African Empire from special surveys. The weightings used in the wholesale price indices naturally cover the transactions to which the indices refer, and differ according to the approach used. In the traditional approach, the weighting coefficients represent the value of purchases and sales of the principal products according to the classification by product, by degree of processing or final use. In the sector approach, the weightings represent the value of purchases and sales of the principal products by sector of the economy.

224. The base periods are relatively old for a few countries, Central African Empire 1958 Central African Empire Congo 1964 based on 1957 weighting conefficients; Ghana 1961, Morocco 1939 for the former index, Tunisia 1940 from the weighting coefficients dating from 1936-1940.

225. The formula used is that of Laspeyres for all countries except Zaire which uses a non-weighted average.

2. Wholesale price movements throughout the world

226. While consumer price indices are available for almost all countries, wholesale price indices are available on a much more limited basis, and for the developing countries they cover only 40 of them.[1]

227. The most advanced countries have a tendency to attach special importance from the point of view of diagnosis to the wholesale price index which measures the status of the market for goods (particularly raw materials) before they enter the retail trade channels. However, the lower the degree of industrialization and the less chance this index has of being useful;[2] however, the sensitivity of this index to fluctuations in world raw material prices, particularly since 1970 (24.7 per cent rise as an annual average), gives this index its value provided that it can throw light on the sectoral distribution of inflationary pressures. Furthermore, we have observed that it is often a rather appropriate indicator to be transposed in place of the implicit sectoral prices.

---

[1] On the basis of the data published in the United Nations Monthly Bulletins of Statistics.

[2] World Economic Survey 1969-1970. The developing countries in the 1960s - The problem of appraising progress, United Nations, Department of Economic and Social Affairs, 1971.

3. Wholesale price movements in Africa

228. We will in succession distinguish the movement of these wholesale prices by country, by product group, then by industry.

(a) Wholesale price movements by country

229. Table 22 below gives the frequency distribution of African countries on the basis of the rise in wholesale prices between 1960 and 1975. Comparing this table with the table of consumer prices, fairly parallel developments may be noted. Out of 18 African countries, 11, or two thirds, recorded average rises of 4 to 5 per cent compared with 58 per cent of the countries for consumer prices. However, while the same countries are met with (Ghana, Zaire) for rises above 10 per cent, notable differences appear in the range of rates between 2 and 3.9 per cent where the two countries listed (Gambia, Ethiopia) recorded rises lower than their consumer prices, while Southern Rhodesia (building materials index), and Morocco experienced the reverse. As for Algeria, the difference arises principally from the fact that the periods taken into account are not similar (1969 to 1975 only for the index of industrial producer prices). As in the case of consumer prices two fairly different well differentiated periods may be distinguished with the year 1972 as cut-off point.

Table 22: Frequency distribution of African countries on the basis of the rise in wholesale prices between 1960 and 1975

Variation in wholesale prices 1/ Annual rate	Country	Frequency No. of countries	 %
2.-3.9	Gambia 2/ 3/, Ethiopia	2	11
4.-5.9	Morocco (G), Tunisia (G), Egypt (G), Sudan 4/ (G), Senegal (B.M.), Ivory Coast (B.M.), Central African Empire (G), Congo (G), South Africa (G), Swaziland, 2/ Zambia (G), Algeria 7/ (G), Gabon (G),	12	67
6.-7.9	Gabon (G), Southern Rhodesia (B.M.)	2	11
8.-9.9	-	-	-
10	Ghana (G), Zaire 6/ (G)	2	11
Total		18	100

Source: Annex IV. Table 1.

Notes: 1/ General Index (G) in its absence building materials index (B.M.). For Ethiopia index of prices of imported products (M).

2/ Source World Bank. 3/ 60-73. 4/ 60-74. 5/ 61-75.

6/ 70-75. 7/ 69-75.

230. Between 1960 and 1972, 15 countries out of 18 recorded relatively low wholesale price rises and for 10 of them rises lower than those for consumer prices. The price differences between the two indices remain small with an average deviation of 0.7 per cent and a maximum deviation of 1.8 and 1.9 per cent (Sudan, Gabon).

231. Between 1973 and 1975, only four countries registered a moderate rise in wholesale prices (Algeria, Egypt, Zambia and Ethiopia), while three countries experienced a rise of over 20 per cent (Sudan, Ghana, Zaire). The remainder - eight countries - recorded rises of between 10 and 15 per cent and one country (Ivory Coast) a rise of between 15 and 20 per cent. As might have been expected for this period, the rise in wholesale prices was greater than the rise in consumer prices for all countries except Senegal, Ghana and Ethiopia, following greater sensitivity of the wholesale price index to fluctuations in world prices (and particularly those of raw materials).

232. The average deviation between the two indices becomes higher for this period (2.5 per cent) and the maximum deviation of 5.7 per cent for Tunisia. This deviation widens when the building materials index is compared with that of consumer prices (6.9 per cent for Senegal and 6 per cent for Southern Rhodesia).

(b) Wholesale price movements by product

233. The composition of the products contained in the wholesale price indices varies from one country to another as a result of different classifications. Although a large number of comparisons can be made, we will restrict ourselves to the following choices:

- Prices of national products and prices of imported products;
- Agricultural producer prices and over-all wholesale price;
- Prices of building materials and over-all wholesale price.

(i) Prices of national products and prices of imported products

234. Four African countries, namely Morocco, Tunisia, Gabon and South Africa publish comparative data for these two products. The share of imported products varies from 23.4 per cent for South Africa to 79.8 per cent for Gabon.

235. Over the period 1960 to 1975 as a whole, the prices of the national products recorded a larger rise than the prices of the imported products for the three developing African countries with a relatively high deviation for Gabon (2.7 per cent on average between 1967 and 1974). Even for the period 1973 to 1975, the trend was identical except for Tunisia where the prices of imported products registered a much higher increase than the prices of national products (16.1 per cent compared with 9.3 per cent). These data limit to some extent the responsibility of external sources in African price inflation.

Table 23: Frequency distribution of African countries on the basis of rises in wholesale prices between 1960 and 1975

1960 - 1972			1973 - 1975				
Low inflation Rates lower than 5 per cent	Moderate inflation Rates between 5 and 10 per cent	High inflation Rates above 10 per cent	Low inflation Rates lower than 5 per cent	Moderate inflation Rates between 5 and 10 per cent	High inflation Rates between 10 and 15 per cent	Rates between 15 and 20 per cent	Rates above 20 per cent
Morocco, Algeria, Tunisia, Egypt, Sudan, Senegal, Ivory Coast, Gambia, Central African Empire, Congo, South Africa, Swaziland, Zambia, Southern Rhodesia, Ethiopia	Ghana, Gabon	Zaire	–	Algeria, Egypt, Zambia, Ethiopia	Morocco, Tunisia, Senegal, Central African Empire, Gabon, Congo, South Africa, Southern Rhodesia	Ivory Coast	Sudan, Ghana, Zaire
15	2	1	-	4	8	1	3

Source: ECA, Annex IV, Table 1.

(ii) Agricultural producer prices and over-all wholesale price

236. Only three African countries have comparative data although for Algeria it is the index of industrial producer prices and not the over-all index which is taken into account.

237. For Algeria the rise in agricultural producer prices was almost two times higher than the rise in industrial prices between 1970 and 1975 (10.1 per cent as against 5.7 per cent). This rise is largely attributable to the rise in livestock and fisheries products and in fruit and vegetables.

238. For South Africa, (share of agricultural products in the index: 11.7 per cent), the rise in the prices of agricultural products since 1969 has been parallel to the over-all index except for 1973.

239. For Zambia (share of agricultural products in the index = 8.2 per cent) the index of agricultural producer prices was some 2.6 per cent higher at an annual rate than the over-all wholesale price index between 1966 and 1974 (8.3 per cent compared with 5.7 per cent).

240. The data for Algeria and Zambia make it possible, to a certain extent, to assume a degree of responsibility on the part of the agricultural sector in the spread of price rises in African developing countries.

(iii) Prices of building materials and over-all wholesale price

241. With the exception of Zaire which calculates a non-weighted wholesale price index, five other African countries publish data concerning these two categories (Morocco, Algeria, Egypt, South Africa, Zambia). The share of building materials in the over-all wholesale price index is fairly low for the countries which supply data (2.1 per cent for Morocco, 2.6 per cent for Egypt).

242. Between 1960 and 1975 prices of building materials registered a higher rise than the over-all index for the three countries (Egypt, Algeria, Zambia, with a maximum deviation of 0.9 per cent for the last-mentioned), a lower rise for Morocco (with a maximum deviation of 1.6 per cent partly attributable to the sharp fall in building materials in 1975) and an identical rise for South Africa.

243. In the absence of any better indication, we shall use as a very approximate measurement the price index of building materials as an expression of the general movement of wholesale prices for the countries which do not have an over-all index.

(c) Wholesale price movements by industry

244. Although some African countries have data relating to wholesale prices by industry (Morocco, Algeria, Egypt, Zambia), these do not always appear in the publications. Nevertheless, the data for Zambia permit a useful comparison between wholesale price indices by industry and implicit sectoral price indices.

Table 24: Deviations betweennwholesale price indices by industry and implicit sectoral price indices for Zambia between 1966 and 1974 (percentage variation)

Industry	Wholesale price index	Implicit price index	Deviations
	I	II	III = I = II
Agriculture	8.28	4.15	4.13
Mining	5.97	7.25	-1.30
Electricity	-1.63	-2.03	-0.40
Manufacturing	5.08	7.42	-2.34
Total	5.70	5.81	-0.11

Source: ECA Questionnaire and Monthly Digest of Statistics, August 1976.

245. A fairly close link emerges between the wholesale price index and the implicit GDP adjustment index, although on a sectoral basis some deviations appear and more particularly in agriculture where the rise in wholesale prices is practically double the implicit prices. Since the price evaluation system differs between the two indices, it would appear that the deviation can be attributed to the impact of indirect taxation and to distortions in the distribution channels.

D. AVERAGE WAGES IN AFRICAN COUNTRIES

246. To a certain extent, the variations in wages determine the variations in prices in some economic sectors. Wages statistics are useful for two purposes:

- To compare real wages.
- To deflate certain economic aggregates.

Before embarking on these questions it is useful to describe briefly some series on wages used in this document.

(a) Average earnings[1]

247. Average hourly (or daily) earnings are generally obtained by dividing total wages paid during a given period by the total number of man/hours (or man/days) actually worked or remunerated during this period, and weekly (or monthly) earnings by dividing total wages paid during a given week (or a given month) by the average number of workers employed during the same period.

248. Statistics on average earnings cover 19 countries as against five for the hourly rates. The statistics are on a montnly basis for 12 African countries (Algeria, Upper Volta, Ghana, Gabon, Chad, Burundi, South Africa, Zambia, Southern Rhodesia, Malawi, Kenya, Tanzania); weekly for two countries (Egypt, Sierra Leone); daily for two other countries (Tunisia, Mauritius) and hourly for three other countries (Mali, Senegal, Reunion).

249. The data generally include payments in cash received from the employer, in other words remuneration for normal working hours, payments for overtime, incentive payments, earnings of piece-workers, remuneration for working hours paid but not worked (annual leave, holidays, sick leave and other paid leave); gratuities, cost-of-living allowances and special payments (for example, end-of-year gratuities). They often include the value of payments in kind (example, Zambia, Kenya). In contrast, family allowances are generally excluded from statistics on earnings (except for Burundi).

(b) Wage rates[2]

250. The data concerning wage rates generally cover only rates of remuneration for adults working during normal hours; as a result no account is taken of remuneration for overtime and other elements added to the wage; however, cost-of-living allowances are often included in the calculation as well as other allowances determined by the wage-fixing procedure, for example, the housing allowance. In a few countries average rates actually paid (remuneration on the basis of time alone) are obtained, by using the wage slips of establishments in the same way as for average earnings. In general, the rates actually paid include remuneration calculated on the basis of the normal duration of work both for overtime and for normal working hours, but they do not take into account incentive payments and other special payments, nor the share of remuneration for overtime corresponding to the payments.

---

[1] See Year Book of Labour Statistics, International Labour Office, annual.

[2] Ibid.

251. The statistics on hourly rates cover five countries, namely Morocco, the Ivory Coast, Togo, Nigeria and Cameroon. In most cases these are minimum rates.

(c) Average wages per employee[1]

252. The estimates concerning wages and salaries include all the cash amounts and allowances in kind paid to the "wage earners" during the reference year as remuneration for the work they do for the establishment. These payments include:

- All cash payments for normal hours and overtime, gratuities and cost-of-living allowances;
- Wages and salaries paid during paid leave and sick leave;
- Taxes and social security and other payments payable by the wage earner and deducted by the employer;
- Allowances in kind.

Social security contributions and pension fund contributions and other social insurance contributions payable by the employer, as well as retirement allowances, family allowances and similar social allowances are not taken into account.

253. The statistics on wages in question cover about 21 African countries including seven already included.

2. Real wage trends in African countries

254. Real wages have been defined[2] as the goods and services which can be purchased with wages or are provided as waves. Accordingly, they measure the purchasing power of wages expressed in terms of goods or services. Approximate indicators of trends in real wages are generally obtained by dividing average gross earnings (or in their absence the wage rate) by a consumer price index. We will distinguish in turn trends in real wages in a few sectors on the basis of two different statistical series: one concerning earnings and wage rates, the other concerning average wages per employee.

---

[1] The Growth of World Industry - General Industrial Statistics, United Nations, volume I, annual.

[2] ILO, International Comparison of Real Wages, ILO, 1956.

Table 25: Synoptic table on wage series (international publication)

<table>
<tr><th rowspan="2"></th><th colspan="6">EARNINGS OR WAGE RATES</th><th colspan="4">ESTIMATE OF AVERAGE WAGES PER EMPLOYEE</th></tr>
<tr><th>Agricultural sector</th><th>non-agricultural sector</th><th>Mining</th><th>Manufacturing</th><th>Construction</th><th>Transport</th><th>Mining</th><th>Manufacturing</th><th>Electricity, gas & water</th><th>Construction</th></tr>
<tr><td>Morocco</td><td>60-75</td><td></td><td>66-71</td><td>60-74</td><td>–</td><td>–</td><td>--</td><td>–</td><td>–</td><td>–</td></tr>
<tr><td>Algeria</td><td>68-75</td><td>–</td><td colspan="4">69-75</td><td>–</td><td>–</td><td>–</td><td>–</td></tr>
<tr><td>Tunisia</td><td>60-74</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td colspan="3">63-74</td><td>63-73</td></tr>
<tr><td>Libya</td><td>–</td><td>-</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td colspan="2">66-74</td><td>67-73</td></tr>
<tr><td>Egypt</td><td>–</td><td colspan="5">60-71</td><td colspan="2">60-72</td><td>68-72</td><td>66-73</td></tr>
<tr><td>Mali</td><td>–</td><td colspan="5">71-74</td><td>--</td><td>–</td><td>–</td><td>–</td></tr>
<tr><td>Senegal</td><td colspan="6">(60-65)</td><td>–</td><td>–</td><td>–</td><td>–</td></tr>
<tr><td>Ivory Coast</td><td>(60-64)</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td>67-74</td></tr>
<tr><td>Upper Volta</td><td>(60-68)/69-71)</td><td>–</td><td>–</td><td colspan="3">69-71</td><td>–</td><td>–</td><td>–</td><td>–</td></tr>
<tr><td>Sierra Leone</td><td>–</td><td colspan="5">66-75</td><td>–</td><td>–</td><td>–</td><td>–</td></tr>
<tr><td>Ghana</td><td colspan="6">60-72</td><td colspan="3">63-72</td><td>67-74</td></tr>
<tr><td>Togo</td><td>(60-63)</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td colspan="3">70-76</td><td>–</td></tr>
<tr><td>Nigeria</td><td>72-75</td><td>–</td><td>(60-66)/72-75</td><td colspan="2">72-75</td><td>-</td><td>63-73</td><td>63-74</td><td>–</td><td>–</td></tr>
<tr><td>Cameroon</td><td>60-74</td><td>–</td><td>–</td><td>–</td><td>60-75</td><td>60-74</td><td colspan="3">70-72</td><td>–</td></tr>
<tr><td>Chad</td><td>(60-66)</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td></tr>
<tr><td>Central African Empire</td><td>–</td><td>–</td><td>–</td><td>-</td><td>–</td><td>–</td><td>–</td><td>70-73</td><td>–</td><td>67-71*</td></tr>
<tr><td>Gabon</td><td colspan="3">(60-67)</td><td>–</td><td colspan="2">(60-67)</td><td>–</td><td></td><td>–</td><td>–</td></tr>
<tr><td>Congo</td><td>--</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td colspan="3">70-72</td><td>–</td></tr>
<tr><td>Zaire</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td colspan="4">68-72</td></tr>
<tr><td>Rwanda</td><td>--</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td colspan="2">68-74</td><td>(68-70)</td><td>67-73</td></tr>
<tr><td>Burundi</td><td colspan="2">73-75</td><td>–</td><td>73-75</td><td colspan="2">71-75</td><td>–</td><td>70-74</td><td>–</td><td>–</td></tr>
<tr><td>Angola</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td>--</td><td colspan="2">70-72</td><td>–</td><td>–</td></tr>
<tr><td>South Africa</td><td>–</td><td>(60-67)</td><td>(60-67)</td><td>(60-67)/68-75</td><td colspan="2">(60-67)/68-75</td><td>60-74</td><td>60-72</td><td>60-70</td><td>64-72</td></tr>
<tr><td>Botswana</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td>-</td><td>–</td><td>–</td><td>–</td><td>71-74</td></tr>
<tr><td>Swaziland</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td colspan="2">68-73</td><td>–</td><td>66-72</td></tr>
<tr><td>Zambia</td><td colspan="6">60-74</td><td colspan="3">60-73</td><td>63-72</td></tr>
<tr><td>Southern Rhodesia</td><td colspan="6">(60-64)</td><td colspan="3">60-73</td><td>64-73</td></tr>
<tr><td>Malawi</td><td colspan="3">(60-64)/68-75</td><td>(60-65)/68/75</td><td>(60-66)/68-75</td><td>(60-63)/68-75</td><td>67-73</td><td>66-73</td><td>67-73</td><td>67-74</td></tr>
<tr><td>Mozambique</td><td>–</td><td>--</td><td>–</td><td>–</td><td>–</td><td>–</td><td colspan="3">67-73</td><td>–</td></tr>
<tr><td>Madagascar</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td>69-74</td><td colspan="2">68-74</td><td>–</td></tr>
<tr><td>Réunion</td><td>(60-66)</td><td>–</td><td>–</td><td>(60-66)</td><td>(60-66)</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td></tr>
<tr><td>Mauritius</td><td colspan="6">66-75</td><td>68-71</td><td colspan="2">67-71</td><td>67-73</td></tr>
<tr><td>Tanzania</td><td colspan="6">60-72</td><td colspan="3">70-73</td><td>63-73</td></tr>
<tr><td>Uganda</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td colspan="3">63-71</td><td>65-73</td></tr>
<tr><td>Kenya</td><td>61-75</td><td>68-75</td><td colspan="4">60-75</td><td colspan="2">63-74</td><td>–</td><td>63-73</td></tr>
<tr><td>Somalia</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td colspan="2">67-73</td><td>–</td></tr>
<tr><td>Ethiopia</td><td>–</td><td>–</td><td>–</td><td>–</td><td>–</td><td>--</td><td>–</td><td colspan="2">63-73</td><td>–</td></tr>
<tr><td>Total</td><td>12</td><td>10</td><td>12</td><td>15</td><td>16</td><td>14</td><td>21</td><td>26</td><td>19</td><td>17</td></tr>
</table>

Sources: ECA from the Yearbook of Labour Statistics 1970 and 1976.
The Growth of World Industry General Industrial Statistics Vol. ., 1967, 1969, 1970, 1973, 1974 and 1975.
UN Yearbook of Construction Statistics 1963-1969, 1964-1973, 1965-1975.

Notes: * Estimates
( ) Old series.

(a) Real earnings and wage rates in a few economic sectors

255. Table 27 gives the frequency distribution of African countries according to the rise in real earnings and wage rates by sector (agriculture, non-agricultural sector, mining, manufacturing, construction, transport and communications).

256. We may note that for an average of 13 countries, almost two thirds record positive rises in real wages. The sectoral distribution of these positive rises relates more to the non-agricultural sector than to agriculture (67 per cent against 45 per cent) and more to mining than to the other sectors (83 per cent against 67 per cent).

257. While most countries fall within a range of rises between -5 and +5 per cent, some countries stand out:

- Burundi, which in all its sectors experienced a fall in purchasing power of more than -10 per cent, except in agriculture;
- The Upper Volta and Nigeria, which in almost all sectors recorded a rise of more than 10 per cent (except for agriculture and mining in Nigeria and transport in the Upper Volta). However, the size of these disparities, although it has origins specific to each country, is of a rather temporary nature (period not exceeding four years and relating to the 1970s) and does not reflect by long-term adjustments.

258. Over a long period the countries listed may be divided into two groups[1]:

- One group of countries which recorded a fall in purchasing power of between 0 and -5 per cent in the non-agricultural sectors: they are Sierra Leone, Malawi, Mauritius to which should be added Morocco, Ghana and Cameroon for agriculture;
- Another group of countries which recorded a rise in purchasing power in the non-agricultural sectors of between 0 and 5 per cent. These are Algeria, Egypt, Mali, Ghana and Kenya to which should be added Zambia and Tanzania which registered more substantial rises of between 5 and 10 per cent.

---

[1] We have omitted to classify Senegal (1960-1965), Gabon (1960-1967), Southern Rhodesia (1960-1964), Reunion (1960-1967) and Tunisia (Statistics on agriculture only).

Table 26: Frequency distribution of African countries according to the rise in real earnings and wage rates by economic sector between 1960 and 1974

Annual percentage variation	ECONOMIC SECTOR						Distribution
	Agriculture	Non-agricultural sectors	Mining	Manufacturing	Construction	Transport and communications	per cent
-10				Burundi	Burundi	Burundi	4
-5 to -9.9	Burundi				Sierra Leone		3
0 to -4.9	Morocco, Ghana, Cameroon, Malawi, Mauritius	Sierra Leone, Malawi, Mauritius	Egypt, Sierra Leone, Nigeria	Algeria, Sierra Leone, Malawi, Mauritius	Algeria, Ghana, Cameroon, Malawi, Mauritius	Egypt, Mali, Cameroon, Malawi, Mauritius	30
0 to 4.9	Tunisia, Nigeria, Zambia, Kenya	Algeria, Egypt, Mali, Ghana, Burundi, Kenya	Mali, Ghana, Zambia, Malawi, Mauritius, Kenya	Morocco, Egypt, Mali, Ghana, South Africa, Kenya	Egypt, Mali, South Africa, Kenya, Zambia	Algeria, Sierra Leone, Ghana, South Africa, Kenya	39
5 to 9.9	Tanzania	Zambia, Tanzania	Algeria	Zambia	Tanzania	Upper Volta, Zambia, Tanzania	13
10	Upper Volta	Nigeria	Morocco, Tanzania	Upper Volta (25.3), Nigeria (34.9), Tanzania	Upper Volta (36.7), Nigeria (16.3)		11
Total	11	12	12	15	15	14	100

Source: ECA from Table 1 in annex 5.

259. These rises in purchasing power in most cases reflect adjustments compared with price rises and are to a degree responsible for a slowing down in growth in a few countries.

(b) Real average wages per employee in a few economic sectors

260. Table 27 gives the frequency distribution of African countries on the basis of the rises in real average wages per employee by economic sector between 1960 and 1975. The statistics on average wages per employee cover a larger number of countries (about 20 on average compared with 13 for earnings and wage rates), but published after a longer delay (delay of about a year after the previous series).

261. Ignoring a few series which cover periods too short to be meaningful and some sectors which are negligible in the total value added of the countries concerned, we may note that the negative rises in real wages apply in particular to the following countries: Malawi, Uganda, Tanzania and Somalia, while high positive rises apply more particularly to the Central African Empire, Angola, and Zaire for rises of more than 10 per cent (except for mining and electricity in Zaire) and Cameroon and Swaziland for rises of between +5 and +10 per cent.

262. For most of the countries this table gives, at the over-all level, results fairly close to the previous table since the positive rises in wages also cover two thirds of the countries. However, the distribution of these rises by sector is somewhat different. It relates more to construction and manufacturing (three quarters of the countries) than to mining, electricity, gas and water (less than two thirds).

263. For some countries, much more marked differences emerge: in this way Tanzania passes from the positive bracket of more than 5 per cent in the previous table to the negative bracket of below 5 per cent in this one; similarly Nigeria, which showed a rise of more than 10 per cent in manufacturing in the previous table, is now classified in this table in the bracket between 0 and 5 per cent (actually 0.3 per cent).

264. Differences in concepts concerning wages and overlapping betwen periods considered are at the root of the deviations which appear in the variations in earnings, wage rates and average wages in a few economic sectors for a few African countries. A comparison of purchasing power between these countries should preferably be based on special uniform surveys generally using the concept of net earnings and encompassing family allowances. Since our purpose is simply to seek to measure a trend in real wages, a positive rise for 19 African countries out of 29 may be seen to emerge overall. The distribution of these prices between the various economic sectors does not appear to the same extent, which must reflect not only adjustments in relation to price rises but also a variation in sectoral productivity.

Table 27: Frequency distribution of African countries on the basis of the rise in real average wages per employee by sector between 1960 and 1975

Annual percentage variation	Economic sectors				
	Mining	Manufacturing	Electricity, gas and water	Construction	Distribution (per cent)
-10	Congo (-36,8) Tanzania				44
-5 to -9.9	Togo	Congo, Malawi, Tanzania, Kenya			55
-0 to -4.9	Libya, Ghana, Nigeria, Cameroon, Mozambique	Rwanda, Malawi, Uganda, Somalia	Egypt, Malawi, Mozambique, Somalia, Ethiopia	(Ivory Coast), Ghana, Malawi, Tanzania, Uganda	
0 to 4.9	Tunisia, Egypt, Rwanda, South Africa, Zambia, Rhodesia, Malawi, Mauritius	Tunisia, Egypt, Libya, Ghana, Nigeria, South Africa, Swaziland, Zambia, Rhodesia, Mozambique, Madagascar, Mauritius, Kenya, Ethiopia	Tunisia, Ghana, Congo, South Africa, Zambia, Mauritius, Uganda	Tunisia, Libya Egypt, South Africa, Zambia, Mauritius, Kenya	44
5 to 9.9	Zaire, Swaziland, Madagascar, Uganda	Cameroon, (Burundi)	Cameroon, Zaire, Swaziland, Madagascar	Togo, Rwanda, Swaziland, Rhodesia	16
10	Central African Empire(21.4), Angola(42.3)	Togo (24.1), Zaire, Angola(24.5)		Central African Empire (17.0), Zaire (15.3), (Botswana(26.4)	
Total	22	25	17	17	100

Source: ECA from table 2 in annex V.

3. Wages and consumer prices in construction

265. Wage statistics are also useful for deflating certain aggregates such as, for example, construction; it is therefore interesting to compare wages in this sector with consumer prices to enable us to evaluate not only their interaction but also their differentiation.

266. Table 28 gives a comparison between consumer prices and wages in construction for 29 African countries between 1963 and 1975.

-Substantial wage rises in this sector appear to be linked to a certain extent with the rise in prices in three African countries, namely Nigeria (35.9 per cent compared with 16.8 per cent for the period 1972-1975), Zaire (26.1 compared with 9.4 per cent for the period 1968-1972) and Botswana (35.6 compared with 7.9 per cent for the period 1970-1974);

-"Autonomous" rises in wages in this sector linked more to pressure of independent claims rather than to price increases emerge in two countries, namely the Upper Volta (40.8 per cent against 2.8 per cent for the period 1969-1971) and the Central African Empire (+12.2 compared with 4.4 per cent for the period 1967-1971);

- Lastly, some African countries were able to exert a degree of pressure on wages in construction despite the rise in prices. This is the case in particular for Sierra Leone (negative rise in the nominal wage, -0.3 per cent compared with a rise in prices of 6.6 per cent for the period 1966-1975) and Burundi (3.6 per cent rise in the nominal wage compared with a price rise of 10.2 per cent for the period 1971-1975).

267. As for the deviations between wages in construction and consumer prices, it appears that for 80 per cent of the countries the trends have been divergent. Only six countries out of 29 are experiencing substantially parallel trends. As a result, it is advisable to avoid as much as possible using consumer prices for deflation in this sector and it appears more appropriate to use in preference wages in other economic sectors or simply minimum wages.

Table 28: Comparison between wages and consumer prices in the construction sector for a few African countries between 1963 and 1974

nnual variation n consumer prices	Annual variation in nominal wages in construction 0 to -4.9	0 to 4.9	5 to 9.9	10 to 14.9	15 to 19.9	20	Total number of countries
0 to 4.9		Tanzania	Tunisia, Libya, Zambia, Rhodesia, Tanzania, Kenya	Swaziland		Upper Volta (40.8), Central African Empire (22.2)	10
5 to 9.9	Sierra Leone	Egypt, Ivory Coast, Cameroon,1/ Ghana, Malawi, Uganda	Algeria, South Africa, Zambia, Malawi, Mauritius	Togo, Rwanda		Zaire (26.1) Botswana (35.6)	16
10 to 14.9		Burundi			Mali		2
15 to 19.9						Nigeria (35.1)	1
Total number of countries	1	8	11	3	1	5	29

ource: ECA from tables 1 and 2 of annex V and table 2 of annex III.

otes: 1/ 1975 for Sierra Leone, Cameroon and Burundi.

PART V

MOVEMENTS OF INTERNATIONAL AND DOMESTIC PRICES IN AFRICAN COUNTRIES

268. Statistics covering recent practice in 33 African countries in the field of external trade are the subject of a separate ECA document.[1] Data on unit values of exports and imports for all African countries by product and by country are set out in tables 2 to 5 of annex VI.

269. Movements of international prices of basic commodities determine to a certain degree trends in domestic prices in African countries and accordingly we are devoting this part to them. We will examine in turn:

- Commodity price movements;
- Adjustment problems following fluctuations in world prices.

A. COMMODITY PRICE MOVEMENTS

1. General developments

270. Movements in the unit values of the external trade of African countries have been subject to the influence of external factors which since 1970 have been more powerful and erratic than ever since the Second World War. Among these factors particular mention should be made of:[2]

- The cycle of demand in the developed market economy countries
- The currency realignment decided upon at the Smithsonian Institution in September 1971
- The weather and its impact on agriculture
- Decisions by the producers concerning the international price of crude petroleum.

271. The period under study may broadly be divided in two (see table 29).

- 1960-1972 when the unit values of exports and imports fluctuated slightly: 1.7 per cent as an annual average for the developing countries compared with 2.6 per cent for Africa with a negative rate of increase in the terms of trade, -0.1 per cent for the two groups;

---

[1] African external trade statistics, E/CN.14/CAS.10/11.

[2] Supplement to World Economic Survey 1975, United Nations, E/5873/Rev.1—ST/ESA/59, New York.

- 1973-1975 when unit values of exports and imports fluctuated very markedly: 38.9 per cent as an annual average for exports and 25.4 per cent for imports for the developing countries compared with 36.9 per cent for exports and 25.8 per cent for imports for Africa. This led to an improvement in the terms of trade of the developing countries and for Africa (successively 10.9 per cent and 9.1 per cent as an annual average) and a deterioration for the economies of the developed countries. However, if we exclude crude petroleum, the terms of trade recorded a deterioration of -3.3 per cent as an annual average for the developing countries during this period.

Table 29: Unit values of external trade and terms of trade by major regions of the world (annual percentage variation)

	Exports			Imports			Terms of trade		
	60-75	60-72	73-75	60-75	60-72	73-75	60-75	60-72	73-75
Developed market economies	5.5	2.4	19.0	6.0	2.0	23.6	-0.5	0.3	-3.8
Developing market economies	8.3	1.7	38.9	6.2	1.7	25.4	2.0	-0.1	10.9
Developing market economies excluding petroleum	5.2	1.6	21.1	...	...	...	...	...	-3.7
Of which:									
Latin America	7.6	2.6	30.2	6.3	2.1	24.5	1.4	0.5	4.7
Asia	8.3	1.0	43.4	5.9	1.5	25.8	2.3	-0.4	14.0
Africa	8.6	2.6	36.9	6.9	2.6	25.8	1.7	-0.1	9.1

Source: ECA, from the International Trade Yearbook 1975 and the Monthly Bulletin of Statistics, April 1973 and April 1977.

272. Table 30 shows the movements of unit values of exports by product for African developing countries. It is clear from this table that prices fluctuated only very slightly over the period 1960-1970: 1.3 per cent as an annual average for agricultural products and 1.7 per cent for mineral products. Although some fluctuations might have been rather substantial for certain products during certain periods of the past decade, they did not reach such an intensity that they affected the general index in so marked a manner as for the period 1970-1975: 1973 and 1974 for agricultural products (32.3 per cent and 50.9 per cent) and starting in 1971 for mineral products (15.2 per cent) and more particularly 1974 (164.7 per cent) because of the share of crude petroleum in African exports.

Table 30: Unit values of export for developing Africa by product (annual percentage variation)

Principal products exported	Share in total exports from developing Africa (per cent)	1960/70	1971/75	1971	1972	1973	1974	1975
Agricultural products	36.8	1.3	19.2[a]	-3.0	4.1	39.3	50.9	...
coffee	(8.1)	4.1	6.3	-2.2	1.4	23.3	13.3	-2.1
Cotton	(7.4)	-0.4	14.9	3.8	7.6	22.9	61.7	-9.8
Cocoa	(6.8)	3.1	12.6	-93.2	-6.9	42.9	58.0	12.0
Sugar	(1.6)	-0.7	33.9[a]	12.3	19.6	18.2	9.3	...
Mineral products	63.2	1.7	34.7	15.2	18.6	39.6	164.7	-12.3
Crude petroleum	(38.5)	-1.7	43.7	35.6	24.9	40.1	201.5	-14.2
Copper	(14.4)	9.0	-4.0	-28.7	-2.2	58.4	29.6	-43.1
Iron	(3.3)	-2.0	-19.4	-8.7	3.9	1.7	29.5	63.0
Phosphates	(1.9)	-1.1	46.1	-1.3	9.5	15.9	296.9	33.7
Total agricultural and mineral products	100.1	1.6	40.9	8.5	13.8	37.4	132.0	...

Source: ECA, on the basis of national publications.

[a] 1971-1974.

273. Total exports from developing Africa are concentrated on a few basic commodities: four agricultural products, namely coffee, cotton, cocoa and sugar, and four mineral products, namely crude petroleum, copper, iron and phosphates, taking up 84 per cent of total exports from developing Africa in 1970. The formation and movement of prices for these few products merit special attention and is the subject of developments which follow[1].

1. Countries exporting agricultural commodities[2]

274. The prices of the main tropical products rose sharply between 1972 and 1974, then stabilized in 1975. These price variations in part reflected the evolution of the economic cycle in the developed countries; they also, at the beginning, met the increasingly frequent wish to hold stocks of products rather than currencies whose values - since they had in 1971 ceased to be linked to the exchange system - had become uncertain.

---

[1] See Supplement to world economic survey 1975 United Nations E/5873/Rev.1 ST/ESA 59 New York 1977.

[2] The ECA data on agricultural producer prices between 1960 and 1975 are incomplete, and are not presented below.

275. However, the market for food products among the tropical products - particularly for sugar, coffee, tea, cocoa and less directly edible oils - was more strongly affected by the variations in supply. For example, the coffee harvest was low in 1970 and in 1973 and the cocoa harvest recorded two successive drops after 1970 (1972 and 1973), while the drought in the Sahel caused a sharp fall in the ground-nut crop in West Africa in 1972. In those cases, the effect of the rise in prices on the export receipts of certain producing countries was lessened to varying extents by the reduction in the volume of exports. In contrast, in the case of sugar the fall in world supply which occurred in 1974 was largely attributable to poor sugar beet harvests in Europe and the Soviet Union; thus most of the sugar-cane-producing developing countries benefited from both the rise in the volume of exports and the rise in prices.

276. We shall give a fairly brief description of the movements of international and domestic prices of four agricultural products, namely, coffee, cotton, cocoa and sugar which accounted for 65 per cent of total exports of agricultural products exported by the African developing countries in 1970.

(a) Coffee-exporting countries

277. Coffee made up 8.1 per cent of the total exports of African countries in 1970. For the period 1970-1975, it accounted for 80 per cent of the export receipts of Burundi, two thirds of those of Uganda, about half of those of Rwanda, a third of those of Ethiopia, a quarter of those of Madagascar and the Central African Empire and a fifth of those of Kenya.

278. Coffee prices rose by 4.1 per cent over the period 1960-1970 with marked fluctuations for 1963 to 1966 (+30.8 per cent in 1964, 11.4 per cent in 1965, +8.6 per cent in 1966); the prices increased substantially in 1970 following a poor harvest (26.6 per cent), fell slightly in 1971 and 1972 and rose again starting in 1973.

279. The prices paid to planters are generally well below the world market prices but in view of the major differences in coffee variety and quality (robusta, arabica) the range of producer prices is very board. In 1972, some countries - Kenya for example - cut the local producer price in line with the 12 per cent fall in the prices of coffee on the international market. As world prices continued to rise, most local producer prices increased substantially in 1973 and again, though to a lesser extent, in 1974.

280. However, although most coffee planters benefited substantially from the rise in world prices, their real incomes on their sales

volume and the movement of local prices. The sales figures fell sharply in 1974 in Gabon, Guinea, Sierra Leone and Togo. Producer prices followed the other local prices but to a lesser degree. Thus in the Ivory Coast the purchasing power of the price of coffee just kept at the level of 10 years previously. In Angola, Uganda and Cameroon, incomes of coffee planters were considerably lower in real terms in 1971-1975 than at the beginning of the 1960s.

(b) Cotton-exporting countries

281. Cotton accounted for 7.4 per cent of the total exports of African countries in 1970. For the period 1970-1975, it made up two thirds of the export receipts of Chad, half of those of Egypt and the Sudan, a third of those of Mali and about a seventh of those of Mozambique.

282. The price of cotton varied only slightly during the period 1960-1972. It shot up in 1973 and 1974, falling back in 1975. At its highest level, the average price of cotton circulating on the international market reached up to three times the 1970 price. The prices paid to planters of extra long staple cotton in Egypt and the Sudan were higher than the average value of cotton on the world market at the beginning of the decade and they were again raised in 1973 and 1974. As far as Egypt is concerned, the price paid to planters in 1974 was in fact equivalent to double that of 1970 in real terms. Certain varieties of short-staple cotton, which are found in Nigeria and Uganda, for example, less expensive at the outset, later increased but to a much lesser extent.

283. Following the rise in world prices in 1973, many african cotton-exporting countries took steps to encourage production (credit facilities to farmers, irrigation schemes, granting of foreign currency to importers of fertilizer, pesticides and other factors of production) such as Egypt.

(c) Cocoa-exporting countries

284. Cocoa accounted for 6.8 per cent of total exports from African countries in 1970. For the period 1970-1975, it made up ½ of the export receipts of Ghana and Equatorial Guinea, a quarter of those of Cameroon and a fifth of those of Benin.

285. In 1970, the price of cocoa on the international market was about 25 per cent higher than it had been during the first half of the 1960s. After falling sharply during 1971 and 1972 (15.4 per cent), with assistance from the low harvests and the rise in demand, the prices rose in 1973 and 1974, stabilizing in 1975.

286. In the second half of the 1960s, the prices paid to the producers of the West African cocoa-exporting countries by the official marketing agencies had a tendency to follow the rise in world prices only after a delay: the relation between the local price and the world price had fallen on average from more than 80 per cent in 1965 to about 40 per cent in 1970. This relation rose in 1971 and 1972, whereas the average value of shipments of cocoa fell and the prices paid to the producers remained steady or increased (Ghana). There were other rises in producer prices in 1973 and 1974 but they were well below those on the world market and the local price/world price relation fell to the level of 1970 or below. Nevertheless it rose again in 1975 as new increases were granted in local prices, while international prices were falling.

287. The rise in producer prices, although it had the effect of lessening in relative terms the disparities among neighbouring countries in West Africa, it accentuated them in certain cases in absolute terms. Smuggling thus continued to be extremely extensive. In 1971, a fifth of cocoa bean production in Ghana was smuggled to Togo and the Ivory Coast. It is thought that Nigeria lost, in 1972/73, 9 per cent of its annual output essentially to Benin.

288. In terms of national currencies, these increases from 1973 to 1975 led to a rise in real producer prices compared with those of 1970 in the Ivory Coast, and to a lesser extent in Nigeria. In Ghana and Cameroon, on the other hand, the price received by the producers did not follow the increase in local consumer prices. It was the governments which, as a result of the official marketing system, benefited from the gains resulting from the rise in international prices from 1973 to 1975.

(d) Sugar-exporting countries

289. Sugar accounted for 1.6 per cent of total exports from African countries in 1970. For the period 1970-1975, it made up almost 90 per cent of the total exports of Mauritius and Reunion and almost a quarter of those of Swaziland.

290. The world price of sugar recorded a most spectacular rise during the first half of the 1970s. Starting from an extremely low point in 1966, it began the decade at a fairly low level and between the middle of 1972 and the end of 1974 it reached an unprecedented peak equivalent to nine times the 1970 average. However, most African countries enjoyed both the high prices and relatively good sugar-cane production. In this way the export receipts have tripled since 1970.

291. Since the major part of the sugar reaches the world market in the state known as "raw" (96° polarization), it is not the planters who first benefit from the rise in income but the factories which process and refine the sugar-cane. However, the sugar-cane planters profited from this price boom and starting in 1974 the rise in the domestic producer price led to a marked increase in local purchasing power.

3. Countries exporting mineral products

292. The fluctuations in demand which characterized the international market for tropical products from 1970 to 1975 also affected the minerals sector in the developing countries. In some respects, the effects of the 1972-1973 expansion and the recession which began at the start of 1974 were more marked. This was so in part because employment is more regulated in the minerals sector than in the tropical products sector, which is first and foremost the domain of small farmers and because the manner of income distribution is therefore more complicated.

293. An expansion in demand generally leads to a series of successive increases - in the price of minerals, the income of the mining enterprise, the profits of the enterprise, the fiscal receipts - which the government draws from the enterprise and from the total wages as the amount of overtime worked and the number of workers engaged increase. A contraction in demand tends to set off opposite effects but in the same order. A serious recession may cut back company income to such a point that mines must be completely or partially closed. If the workers lose their jobs, the effect on their incomes and their economic status is generally more serious than that which is due to a reduction in the income which farmers draw from a cash crop.

294. Furthermore, in most developing countries the minerals sector tends to be more dependent on imports than the agricultural sector, and particularly the forestry sector. Thus from 1970 to 1975 the minerals sector was in practice sensitive to the rapid rise in external prices of capital goods and even more of energy. In many cases, the extraction costs (expressed in dollars) tripled during these five years and, as a result, the operation of certain low-grade ore deposits ceased to be profitable. The introduction of a number of new mines in Botswana, Mauritania and Zaire, for example, was halted and the real reserves of ore fell.

295. It should also be mentioned that the minerals sector is very substantially dependent on direct foreign investment.

296. Lastly, within the framework of international trade, the minerals sector also differs from the agricultural sector in the manner of price formation. In several cases, the limited number of exports, the specific nature of the product, sometimes a concentrate of a single ore, or the degree of integration between the mining enterprise in the developing country and the parent company (foundry and refinery works), established in a developed country, means that a competitive market is not possible. In these circumstances the prices are sometimes imposed and calculated in the light of fiscal policy when a foreign company is involved (as in the case of iron ore and bauxite in some countries) or are determined unilaterally by the producing country when it has a sufficiently dominant position in the market (as in the case of phosphates in 1974).

297. We shall give a fairly brief description of price movements for four mineral products, namely petroleum, copper, iron and phosphates, which accounted for 92 per cent of the mineral products exported from African developing countries in 1970.

(a) Oil-exporting countries

298. Crude petroleum accounted for 38.5 per cent of the total exports of African countries in 1970. For the period 1971-1975, it made up 90 per cent of Libya's export receipts, 80 per cent of those of Algeria and Nigeria, 50 per cent of those of Gabon, a third of those of Tunisia.

299. After a decade of little change, the price of crude petroleum on the international market began to rise rapidly at the beginning of the 1970s: the mean export values increased by 35.6 per cent in 1971, 24.9 per cent in 1972 and 40.1 per cent in 1973. These rises are the result of the negotiations between the producing States and the operating companies concerning the so-called "posted" prices and the fiscal arrangements which determine prices. Following a joint decision taken by the Organization of Petroleum-exporting Countries (OPEC) at the end of 1973, the average price in 1974 was raised to more than three times the previous year, which led to a rise in mean export values of 201.5 per cent in 1974. In 1975 a slight decline occurred (-14.2 per cent).

(b) Copper-exporting countries

300. Copper accounted for 14.4 per cent of total exports from African countries in 1970. For the period 1970-1975 it made up 90 per cent of the export receipts of Zambia and 60 per cent of those of Zaire.

301. The rise in the price of copper in 1966 (46.9 per cent) had set off a series of measures designed to reaffirm control by the governments of the host countries over their natural resources. Zaire's copper mines were nationalized in 1966 and in Zambia in 1970. In the first years of the decade, the prices tended to fall compared with the record figure in 1970 (-16.5 per cent). This tendency was reversed in 1972 and prices increased in 1973 and 1974 (+43.3 per cent), falling again in 1975 (-43.1 per cent), so that the price of exported copper in 1975 was 18.6 per cent lower than the 1970 price.

302. In 1972, in order to reduce the price fluctuations, the International Council of Copper-exporting Countries (CIPEC) fixed a minimum export price and decided to out bacm production in 1974 and 1975. None of these measures seems to have had any immediate effect. The minimum price - 53 cents a pound, which was roughly equivalent to the average recorded in 1968-1971 - was soon exceeded as a result of the recovery and this average 1973 price was about 79 cents a pound. The reduction in normal production - fixed at 10 per cent at the end of 1974 and raised to 15 per cent in April 1975 - did not prevent an accumulation of stocks: these reached a record level at the London Metal Exchange and the price fell to less than 50 cents a pound before the trend was reversed at the beginning of 1976.

(c) Iron-ore-exporting countries

303. Iron ore accounted for 3.3 per cent of the total exports of African countries in 1970. For the period 1970-1975, it made up three quarters of the export receipts of Mauritania and two thirds of those of Liberia and an eighth of those of Sierra Leone.

304. The average price of iron ore on the international market is more liable to the influence of contractual arrangements than that of an unstable daily market. Trends in export prices from African countries passed through three fairly distinct periods:

- 1960-1964: fall (-6 per cent)
- 1965-1970: relative stability (0.4 per cent)
- 1971-1975: substantial rise (19.4 per cent)

(d) Phosphate-exporting countries

305. The price of phosphate accounted for only 1.9 per cent of total exports from African countries in 1970. For the period 1971-1974, it made up half the export receipts of Togo, a third of those of Morocco and a sixth of those of Senegal.

306. The price of unprocessed fertilizers fluctuated little between 1960 and 1973; then, as a result of successive increases in the sales price of mineral phosphates starting in 1974, it grew rapidly to reach on average in 1975 a level higher than five times the 1970 level. These increases are attributable to Morocco, the principal exporter, where the price of phosphates, more or less stable for many years at a level slightly above $14 a tonne, rose to $42 in January 1974, $63 in July 1974 and $68 in January 1975. The other exporters followed Morocco's example.

307. This quadrupling in price had little immediate effect on demand. It occurred at a time when the increase in the price of oil - of a similar magnitude - was leading to a parallel increase in the cost of nitrogenous fertilizers and when the rise in the prices of cereals and other food products was encouraging farmers to expand their areas under crops and take various measures to increase yield. Towards the end of 1974, however, as the price of cereals was beginning to fall and the combination of recession and inflation was affecting the cash flow of a large number of farmers in the developed market economy countries, fertilizer consumption began to decline. The volume of phosphates used in 1974-1975 was about 15 per cent lower than the 1973-1974 level.

B. ADJUSTMENT PROBLEMS FOLLOWING THE FLUCTUATIONS IN WORLD PRICES

1. General problems

309. World developments concerning food products and energy were influenced only indirectly by the economic situation in the developed market economy countries. Moreover, the effects of these developments on African countries did not make themselves felt solely in terms of exports, as in the case of the basic commodities dealt with, but in the vast majority of countries in terms of imports.

310. As far as food products are concerned, the principal problem was to increase production so as to offset the effects of the poor harvests in many major countries. The poor harvests had serious repercussions on the world market since it was necessary to dig into international reserves; as a result stocks were dangerously reduced and prices reached extraordinarily high levels. In view of the importance of food products in the consumer's basket, most African countries endeavoured to contain local prices, at least those of essential products, particularly cereals to protect the standards of living and prevent the rise in world food products from aggravating domestic inflation. As they were often obliged to resort to price rises to stimulate local production in view of the rise in the purchase costs of agricultural inputs, many African countries were compelled to adopt double or multiple price systems. Many governments had to exert quantitative supervision in various forms: limitation of exports, imposition of quotas on products sold by the country's agricultural units, rationing of urban populations, and to establish subsidized distribution systems, sometimes through shops managed by the State.

311. As far as energy is concerned, the situation changed more suddenly, the rise in prices was much sharper and a much more serious gulf was created between the small number of exporters and the other countries. Although the cost of energy is much less important than the cost of food products, many governments taking into account the vital role it plays in the modern production system as a whole and in particular in the field of transport, manifested unwillingness to increase the inflationary forces by taking fiscal measures to raise prices.

312. It has become traditional to distinguish the oil-exporting countries from the others. The first group of countries encountered favourable terms of trade for the period 1970-1975 in contrast to the other groups of African countries which encountered unfavourable terms of trade. Furthermore, the adjustment problems in the oil-exporting countries are different in kind from those of the other countries.

2. Adjustment in the oil-exporting countries

313. Having no international liquidity problem, this group of countries, as distinct from all the others, increased its imports substantially and throughout the period 1970-1975 enjoyed a large trade surplus.

314. In parallel with public income, expenditure increased. Almost all the oil-exporting countries had the declared objective of diversifying their economies. However, the big leap forward in these countries since 1973 places a heavy burden on the existing infrastructure. (Overloaded transport systems, shortage of skilled manpower and technical know-how, constraints on housing and other public services following immigrants and consultants in certain countries, pressure on wages and wage bills in Nigeria).

315. However, to judge by the basket of goods and services taken into account in the local consumer price indices, inflation was not markedly stronger in the oil-exporting countries than in the other African countries.

3. Adjustment in the oil-importing countries

316. Oil provided in 1973, 60 per cent of the industrial energy used in the oil-importing developing countries. In about a third of these countries, oil was the only source of commercial energy and in three quarters of them, it represented more than 80 per cent of the primary energy consumed. It covered less than half the the requirements in only a small number of countries: Southern Rhodesia and Zambia where coal is an important source of energy. Oil and petroleum products were in many developing countries a major import. In almost 60 per cent of the oil-importing countries, expenditure on petroleum in 1973 made up more than 5 per cent of the total value of imports.

317. The tripling of the price of oil from 1973 to 1974 profoundly upset the economies of these countries, aggravating the domestic inflationary pressures as a result of the rise in costs, particularly in transport, metallurgical and other industries, major energy consumers - and disturbing an external balance which was already becoming precarious given that export prices had stabilized at the end of the period and that the unit value of the imported manufactured products continued to rise rapidly.

318. To different degrees, all the countries reacted to the new price relations by endeavouring to conserve energy and to obtain and use replacement energy sources (coal, hydroelectric energy). For economic and technical reasons, only modest economies were achieved in oil consumption, and it proved difficult to increase production of replacement energy sources already being used and even more difficult to discover and exploit new ones.

319. Finally, almost everywhere the price of fuel outstripped the general price index, the margin being substantial for retail prices and even more so for wholesale prices in African countries.

CONCLUSION

320. It should be possible to improve the analysis of price movements by kind of economic activity with the work undertaken by the United Nations concerning an integrated system of price and quantity statistics. International guidelines already exist in this field[1] and it is hoped that they will be widely disseminated.

321. National practice in some 24 African countries shows differences, sometimes important, with the recommendations drawn up. The detailed methodological publications on national accounts data at constant prices are sometimes incomplete for certain countries and totally absent for others. Better collection of data and the preparation of sounder price and quantity indices should provoke improvements which would permit more thorough analysis of price movements by kind of economic activity.

---

[1] Guidelines on principles of a system of price and quantity statistics, United Nations, Statistical papers, series M, No.59, New York, 1977.

322. The absence of such data for almost three quarters of the African countries is a major handicap for any study on price movements by kind of economic activity in Africa as a whole. The development and application of sectoral deflators to the various economic aggregates in current values would enable the Economic Commission for Africa to gauge more reliably price movements by kind of economic activity for all African countries.[1] However, these exercises could in no way replace the efforts of the national statistical services either in drawing up national accounts data at constant prices or in improving them.

---

[1] A preliminary exercise of this type has been attempted for the period 1970-1975 for all African countries.

ANNEXE/ANNEX I

PRIX IMPLICITES DU PIB POUR QUELQUES PAYS AFRICAINS
IMPLICIT PRICES OF GDP FOR SELECTED AFRICAN COUNTRIES

Tableau/Table 1 : Prix implicites deflateurs du PIB a/ par genre d'activité économique dans quelques pays africains (1960-1975)/ Implicite price deflators of GDP by kind of economic activity for selected African countries (1960-1975)

Indice 1970 = 100

Pays et années/ Countries and years	Produits intérieur Brut/Gross Domestic Product	Agriculture	Industries extratives/ Mining	Electricité, gaz et eau/Electricity gas and water	Industries manufacturières/ Manufacturing	Construction	Commerce/ wholesale and retail trade	Banques, assurances, affaires immobilières et service fournis aux entreprises/ Finance, insurance, real estate and buisiness services	dont logements occupés par les propriétaires/ of which owner occupied dwellings	Transports entrepôts et communications/ Transport storage and communication	Administration publique/ Public administration	Autres services/ Other services
TUNISIE/TUNISIA												
1960	69.1	67.8	70.9	93.1	64.2	67.6	74.3	93.0	-	87.4	73.0	103.4
1961	74.0	70.2	70.0	93.1	66.7	70.3	75.7	93.7	-	90.2	76.3	81.2
1962	74.8	72.1	70.9	94.6	74.2	76.0	75.8	93.0	-	88.0	73.0	81.2
1963	78.9	78.6	65.4	98.9	81.2	74.1	79.1	83.2	-	92.9	78.1	75.7
1964	80.4	74.8	70.2	90.5	76.7	78.9	89.8	100.7	-	101.8	77.6	83.7
1965	88.2	79.3	90.8	95.9	93.6	92.7	88.7	90.1	-	106.3	86.6	92.3
1966	89.7	80.4	83.8	93.1	86.3	92.7	91.8	93.0	-	107.5	90.0	95.1
1967	93.5	86.5	90.5	90.1	89.5	96.4	94.0	93.0	-	111.0	92.7	98.1
1968	93.7	88.3	67.9	93.1	93.4	96.5	91.9	96.0	-	108.3	94.9	96.2
1969	97.3	91.6	94.6	100.7	94.8	99.3	97.8	100.3	-	104.0	98.9	99.8
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0
1971	106.7	107.0	124.2	103.0	100.9	100.0	106.9	103.5	-	106.9	105.6	107.2
1972	108.9	110.9	123.2	96.9	104.7	103.2	83.7	104.8	-	98.6	107.9	93.2
1973	117.4	119.9	171.0	95.7	112.5	108.3	88.2	109.3	-	104.4	113.1	98.0
1974	140.7	139.3	329.2	98.7	143.6	141.[illegible]	90.8	109.2	-	123.1	117.7	120.8
1975												
LIBYE/LIBYA	1/											
1962	67.7	44.8	73.3	83.3	82.0	38.6	73.6	69.1	68.6	74.2	65.7	68.7
1963	72.5	45.6	78.5	83.3	85.9	54.1	76.6	71.4	73.3	77.6	70.8	75.1
1964	77.2	52.9	85.0	83.3	91.1	47.6	79.8	73.5	73.3	84.5	74.5	78.5
1965	81.0	57.0	89.2	166.7	93.3	49.9	83.5	75.3	75.4	87.8	79.0	82.8
1966	87.8	64.8	95.9	83.3	94.4	59.3	87.5	84.7	84.9	94.8	85.9	87.3
1967	93.1	69.5	100.1	83.3	94.5	66.0	91.1	100.9	104.2	98.1	86.1	92.7
1968	99.0	78.9	106.9	111.1	96.4	77.8	94.1	107.8	110.0	99.7	92.5	93.3
1969	99.5	86.4	103.6	125.0	98.2	91.0	100.0	119.5	121.8	98.7	100.8	99.0
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EGYPTE/EGYPT 2/											4/	
1960		76.6	...	123.5	123.5	140.6	76.4	...	...	87.7	90.7	...
1961		76.6	...	136.7	136.7	140.6	76.4	...	...	80.7	90.9	...
1962		76.5	...	123.5	123.5	140.6	76.4	...	...	84.3	90.7	...
1963		80.4	...	123.5	123.5	140.6	82.6	...	...	87.5	90.4	...
1964	87.4	76.6	...	118.5	118.5	140.6	84.4	...	...	90.1	95.2	...
1965	90.4	93.0	...	118.2	118.2	99.9	89.5	...	...	100.6	97.0	...
1966	93.5	95.4	...	118.2	118.2	106.5	91.3	...	...	101.3	98.7	...
1967	96.3	97.3	...	117.2	117.2	106.1	95.1	...	...	101.6	99.1	...

Tableau/ Table / 1 : Prix implicites déflateurs du PIB[a] par genre d'activité économique dans quelques pays africains (1960 - 1975)/(suite)
Implicite price deflators of GDP by kind of economic activity for selected African countries (1960 - 1975) (cont'd)

Indice 1970 = 100

Pays et années/ Countries and years	Produits intérieur Brut/ Gross domestic product	Agriculture	Industries extractives/ Mining	Electricité, gaz et eau/ Electricity, gas and water	Industries manufacturières/ Manufacturing	Construction	Commerce/ Wholesale and retail trade	Banques, assurances, affaires immobilières et service fournis aux entreprises/ Finance, insurance, real estate and buisiness services	dont logements occupés par les propriétaires/ of which owner occupied dwellings	Transports entrepôts et communication/ Transport storage and communication	Administration publique/ Public administration	Autres services/ Other services
EGYPTE/EGYPT[2]												
1968	97.2	102.8	...	117.2	94.3[3]	104.9	96.4	...	...	100.6	98.3[4]	98.3
1969	99.0	108.3	...	111.5	94.9[3]	108.3	97.2	...	...	102.0	98.7	98.7
1970	100.0	100.0	100.0	100.7	100.0	100.0	100.0	...	...	100.0	100.0	100.0
1971	102.2	106.2	105.9	108.8	101.0	94.9	103.0	...	...	100.5	100.6	100.6
1972	...	105.0	...	...	...	104.7	100.9	...	...	100.7	97.5	97.5
1973	(103.9)[1]	109.3	117.0	101.3	102.6	98.7	103.9	...	...	95.7	100.2	100.2
ENEGAL[15]												
1960	82.2[13]	82.9	125.0	73.9	85.4	85.0	85.2		75.3[14]	78.3	77.9	76.1
1961	84.9	87.1	100.0	75.5	89.6	88.2	86.2		76.9	79.4	80.1	77.9
1962	87.2	90.6	100.0	76.9	89.1	89.[illegible]	86.0		79.5	81.6	86.7	79.8
1963	87.0	87.8	90.9	80.6	88.2	90.5	86.9		82.1	84.0	87.8	81.7
1964	89.9	92.4	100.0	84.8	90.1	92.0	88.9		83.6	86.0	90.1	84.8
1965	90.7	92.5	94.4	90.6	90.5	93.[illegible]	89.3		86.1	88.8	91.4	96.4
1966	91.4	92.4	95.0	96.1	92.3	95.3	87.6		87.7	91.6	94.3	90.3
1967	92.5	92.1	95.7	101.0	93.6	96.[illegible]	90.0		91.2	93.1	93.5	92.1
1968	91.2	89.5	91.3	102.8	89.3	98.[illegible]	88.5		94.9	93.8	96.0	95.7
1969	96.3	92.8	100.0	115.7	97.3	99.7	95.3		97.4	96.7	98.7	97.8
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0
1971	103.4	107.3	100.0	96.1	104.6	101.1	100.2		102.6	102.4	102.6	103.3
1972	107.8	113.6	125.0	99.1	108.9	102.2	106.6		112.0	97.3	108.7	104.8
1973	116.1	125.3	136.0	100.9	110.6	105.3	120.4		130.8	97.1	120.2	108.3
1974	135.9	126.9	416.3	136.4	111.1	124.9	135.2		120.0	134.1	141.0	142.5
1975	166.9	154.7	465.0	136.8	136.1	151.7	170.1		120.4	154.8	183.4	187.7
ALI[16]												
1969	94.4	94.0	–	...	95.8	...	92.2[17]	...	...	...	100.6	...
1970	100.0	100.0	–	...	100.0	...	100.0	...	...	...	100.0	...
1971	105.1	104.8	–	...	103.0	...	105.8	...	...	...	101.1	...
1972	105.7	105.3	–	...	102.2	...	109.2	...	...	...	104.0	...
1973	112.7	128.8	–	...	125.0	...	118.5	...	...	...	101.9	...
IERRA LEONE												
1963	82.4[1]	83.0	84.3	96.0	75.5	96.7	88.0	72.6	–	80.1	98.5[9]	...
1964	88.8	87.6	86.6	110.8	79.6	99.3	91.6	82.0	–	89.9	101.1	...
1965	90.5	91.4	85.6	137.1	85.1	100.2	91.9	82.6	–	88.3	102.0	...
1966	93.8	92.3	89.6	138.0	87.1	100.9	103.3	86.4	–	89.7	101.9	...

ableau/ 1 : Prix implicites déflateurs du PIB[a/] par genre d'activité économique dans quelques pays africains (1960 - 1975) (suite)/
able Implicite price deflator of GDP[a/] by kind of economic activity for selected African countries (1960 - 1975) (cont'd)

Indice 1970 = 100

ys et années/ untries and ears	Produits intérieur Brut/ Gross domestic product	Agriculture	Industries extractives/ Mining	Electricité, gaz et eau/ Electricity, gas and water	Industries manufacturières/ Manufacturing	Construction	Commerce/ Wholesale and retail trade	Banques, assurances, affaires immobilières et service fournis aux entreprises/ Finance, insurance, real estate and buisiness services	dont logements occupés par les propriétaires/ of which owner occupied dwellings	Transports entrepôts et communication/ Transport storage and commucation	Administration publique/Public administration	Autres services/ Other services
IERRA LEONE (suite)												
1967	94.5	96.9	85.4	122.7	87.9	101.1	101.7	90.3	-	87.8	102.7	...
1968	97.1	95.9	96.4	115.2	86.9	101.4	107.7	93.0	-	89.7	101.5	...
1969	102.1	96.3	114.4	116.9	93.3	100.1	105.5	99.2	-	102.2	100.0	...
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	...
1971	101.2	103.7	93.4	83.2	102.0	100.3	107.7	98.9	-	103.0	102.0	...
1972	108.5	111.5	121.4	45.0	94.4	101.[illegible]	116.1	100.1	-	99.7	105.1	...
1973	128.5	133.7	166.3	37.8	116.2	116.[illegible]	145.3	105.8	-	114.5	104.4	...
1974												
IBERIA												
1964	97.6	104.2	103.1	111.8	90.9	86.1	81.2	87.3	86.2	95.7	107.0	94.9
1965	97.9	100.7	105.6	113.7	89.0	85.7	83.0	87.0	86.4	92.6	112.6	95.7
1966	96.3	94.5	104.0	111.8	89.6	87.6	86.5	89.9	89.1	92.0	110.7	94.3
1967	96.8	94.6	101.9	114.9	91.9	89.1	88.7	92.5	89.8	97.0	110.6	95.7
1968	98.5	90.5	108.5	101.7	96.5	91.4	88.8	93.7	92.0	97.0	112.5	98.0
1969	101.1	98.9	103.3	105.4	100.9	96.4	99.2	99.9	98.2	95.9	115.1	98.2
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1971	100.4	94.6	104.8	87.5	103.3	94.6	94.7	102.5	100.6	102.6	109.6	100.8
1972	105.0	93.9	113.9	97.1	102.2	109.7	96.7	112.9	110.3	102.4	120.9	102.4
1973	118.3	125.4	121.7	75.7	112.3	111.1	97.2	144.0	140.2	102.9	132.5	106.0
HANA												
1968	85.1	77.1	116.3	87.5	107.[illegible]	94.4	82.9	95.5	-	81.8	89.1	82.6
1969	94.6	93.1	116.3	92.4	102.2	99.2	93.5	95.5	-	88.5	92.4	100.0
1970	100.0	100.0	100.0	100.0	108.0	100.0	100.0	100.0	-	100.0	100.0	100.0
1971	104.8	99.0	107.6	98.8	118.4	100.7	105.3	121.9	-	102.0	103.1	114.6
1972	121.3	113.2	161.7	76.8	144.9	122.0	116.0	142.5	-	109.2	121.3	127.4
1973	143.1	146.9	231.7	60.1	159.5	131.1	136.4	146.0	-	106.1	123.6	148.8
1974	182.3	193.1	308.4	54.7	200.3	163.8	175.1	128.4	-	142.7	154.6	172.1
IGERIA[10/]												
1960	71.6[1/]	64.9	77.3	73.7	79.5	70.1	70.2	82.9[9/]	-	86.0	88.7	...
1961	75.6	68.7	89.7	72.0	79.6	81.6	71.5	82.7	-	91.6	94.9	...
1962	79.9	73.3	93.9	64.5	84.0	81.9	76.5	87.2	-	92.6	95.4	...
1963	77.6	70.5	87.5	69.3	80.5	81.5	73.3	91.2	-	93.7	97.6	...
1964	78.4	70.9	86.3	71.1	80.5	87.[illegible]	73.1	93.7	-	96.2	100.0	...

Tableau/ 1 : Prix implicites déflateurs du PIB a/ par genre d'activité économique dans quelques pays africains (1960 - 1975) (suite)/
Table Implicite price deflators of GDP a/ by kind of economic activity for selected African countries (1960-1975) (cont'd)

Indice 1970 = 100

ays et années/ ountries and ears	Produits intérieur brut/Gross domestic product	Agriculture	Industries extractives/ Mining	Electricité, gaz et eau/ Electricity, gas and water	Industries manufacturières/ Manufacturing	Construction	Commerce/ Wholesale and retail trade	Banques, assurances, affaires immobilières et services fournis aux entreprises/ Finance, insurance, real estate and business services	dont logements occupés par les propriétaires/ of which owner occupied dwellings	Transports entrepôts et communication/ Transport storage and communication	Administration publique/Public administration	Autres services/ Other services
IGERIA (suite)												
1965	1/ 78.9	71.1	89.7	63.8	81.5	90.0	74.3	9/ 93.2	-	96.5	100.0	...
1966	88.5	85.9	72.8	63.2	88.2	92.2	85.5	92.6	-	98.9	99.9	...
1967	85.5	82.4	59.3	60.2	85.8	93.4	81.9	92.7	-	100.9	100.0	...
1968	83.4	77.5	79.1	54.9	83.2	92.0	78.8	92.8	-	100.2	100.0	...
1969	87.9	81.9	95.4	76.9	89.8	93.6	84.9	99.3	-	101.5	100.0	...
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	...
1971	112.6	111.9	134.2	92.0	113.4	108.0	113.0	100.8	-	103.5	106.2	...
1972	117.3	121.8	137.3	89.9	112.6	110.3	117.4	99.8	-	106.9	107.0	...
1973	127.7	126.9	196.5	79.7	118.5	109.5	122.6	100.1	-	111.0	104.9	...
CHAD/CHAD												
1968	82.8	84.0	66.7	137.1	81.6	70.7	76.1	93.3	-	104.6	2/ 90.9	...
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	...
AIRE												
1968	84.5	89.6	88.0	95.7	98.4	83.7	87.0	2/ 83.8	-	86.2	68.2	...
1969	96.0	94.8	101.7	96.9	116.0	88.7	100.9	96.6	-	100.0	87.0	...
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	...
1971	99.7	98.6	69.4	100.0	109.6	114.8	108.0	100.0	-	103.1	123.[illegible]	...
1972	106.8	101.8	70.7	100.0	115.0	109.3	122.7	100.0	-	128.4	132.0	...
1973	134.9	142.0	137.9	100.0	124.2	115.2	136.6	100.0	-	149.2	132.0	...
1974	152.0	149.3	163.8	106.6	149.2	131.6	174.7	100.0	-	103.9	145.1	...
WANDA												
1967	13/ 100.0	100.0	100.0	100.0	100.0	100.0	16/ 100.0	...	...	...	100.0	...
1968	105.9	109.2	101.7	100.0	100.0	100.0	100.0	...	...	...	100.0	...
OTSWANA 11/												
1967	88.8	87.6	78.6	37.5	184.2	35.9	100.0	90.3	-	82.8	106.3	36.8
1968	88.2	90.8	85.7	37.5	100.0	54.3	78.9	91.7	-	79.1	106.7	50.0
1971	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0

Tableau/Table 1 : Prix implicites déflateurs du PIB[a/] par genre d'activité économique dan
Implicite price deflators of GDP by kind of economic activity for sele

Pays et années/Countries and years	Produits intérieur brut/Gross domestic product	Agriculture	Industries extractives/Mining	Electricité, gaz et eau/Electricity, gas and water	Industries manufacturières/Manufacturing
ZAMBIE/ZAMBIA					
1965	66.1	85.0	49.7	103.2	64.6
1966	82.2	91.2	77.7	104.6	77.5
1967	88.3	94.6	82.3	115.6	83.2
1968	91.4	97.4	92.5	125.1	93.9
1969	114.5	99.2	124.7	100.4	99.1
1970	100.0	100.0	100.0	100.0	100.0
1971	94.4	110.8	74.5	94.9	106.8
1972	97.5	113.0	74.5	97.5	116.5
1973	115.7	120.5	119.2	91.7	119.8
1974	129.1	126.3	136.2	88.8	137.4
1975	106.2	122.4	36.2	90.8	160.4
1976	119.1	147.9	43.8	96.9	192.2
TANZANIE/TANZANIA					
1964	93.1[1/]	100.9	87.8	90.2	81.5
1965	91.8	95.5	78.8	95.1	83.2
1966	93.5	94.8	92.4	109.5	86.5
1967	92.9	92.0	95.3	106.1	86.3
1968	94.2	92.1	91.0	105.0	91.8
1969	96.1	94.5	95.1	98.8	95.5
1970	100.0	100.0	100.0	100.0	100.0
1971	103.3	104.5	79.3	103.8	103.6
1972	111.6	111.2	105.7	106.2	118.5
1973	122.5	124.5	145.6	105.7	129.9
1974	142.7	154.8	184.8	101.8	142.9
OUGANDA/UGANDA					
1960	71.2[1/]	65.1	31.1	109.9	86.7
1961	74.1	68.2	28.8	108.9	90.5
1962	73.8	67.9	32.0	106.1	87.4
1963	74.3	68.7	33.7	135.9	85.5
1964	78.6	74.3	59.5	120.1	80.8
1965	86.7	84.1	100.5	107.0	84.8
1966	85.5	82.2	82.6	103.8	83.7
1967	84.7	80.3	70.1	101.4	84.2

quelques pays africains (1960 - 1975) (suite)/
ed African countries (1960 - 1975) (cont'd)

Indice 1970 = 100

tru- ion	Commerce/ Wholesale and retail trade	Banques, assurances, affaires immobilières et services fournis aux entreprises/ Finance, insurance, real estate and buisiness services	dont logements occupés par les propriétaires/ of which owner occupied dwellings	Transports entrepôts et communication/ Transport storage and communication	Administration publique/Public administration	Autres services/ Other services
						14/
7.0	75.4	...	...	79.8	89.4	76.8
9.7	77.5	...	...	88.2	88.7	72.6
4.5	92.5	...	...	93.8	103.7	81.5
3.5	98.4	...	...	95.8	104.0	85.6
6.4	102.8	...	...	99.1	113.6	101.7
0.0	100.0	...	...	100.0	100.0	100.0
0.5	99.7	...	...	105.3	113.9	105.2
8.3	109.0	...	...	115.2	113.8	109.9
0.3	111.9	...	...	124.5	120.8	116.0
6.0	122.4	...	...	138.5	137.5	132.8
3.5	132.4	...	...	154.6	157.1	144.9
2.3	146.3	...	...	175.9	172.9	156.5
					2/	
.6	92.9	83.8	84.0	92.2	87.3	...
5.2	93.3	85.7	85.8	99.2	92.6	...
.0	94.1	90.4	90.5	102.2	94.1	...
.2	95.1	93.2	92.7	102.2	94.8	...
.6	95.1	96.8	96.6	102.8	97.2	...
.7	93.8	97.5	97.5	106.0	99.2	...
.0	100.0	100.0	100.0	100.0	100.0	...
.7	104.7	105.1	104.4	99.6	100.5	...
.2	119.8	114.3	114.5	105.4	102.9	...
.1	134.4	121.2	119.9	115.3	107.2	...
.5	159.6	137.0	136.9	125.1	117.1	...
.1	74.2	69.0	81.1	100.4	100.0	72.3
.0	77.4	70.1	81.6	102.3	99.7	73.2
.6	73.1	70.7	79.3	102.3	29.7	74.4
.7	73.5	73.9	81.9	104.9	100.3	76.7
.6	80.9	76.1	86.4	98.2	100.0	80.1
.1	94.5	83.7	83.9	108.5	100.0	87.9
.8	96.4	83.0	85.8	104.9	100.0	87.9
.1	83.7	87.6	101.6	93.4	100.0	88.4

Tableau/ Table / 1 : Prix implicites déflateurs du PIB a/ par genre d'activité économique dans que
Implicite price deflators of GDP by kind of economic activity for selected

Pays et années/ Countries and years	Produits intérieur brut/Gross domestic product	Agriculture	Industries extractives/ Mining	Electricité, gaz et eau/ Electricity, gas and water	Industries manufacturières/ Manufacturing
OUGANDA/UGANDA (suite)					
1968	87.8	82.3	79.6	101.6	92.3
1969	89.2	83.4	101.5	101.7	95.4
1970	100.0	100.0	100.0	100.0	100.0
1971	107.0	112.2	95.2	99.4	102.3
KENYA					
1964	91.4	100.1	108.3	81.7	84.5
1965	90.9	99.2	100.6	82.8	87.2
1966	93.6	103.5	108.3	86.1	92.0
1967	94.0	100.6	113.7	96.5	93.4
1968	96.2	99.1	113.2	94.6	94.8
1969	97.6	96.6	108.3	96.9	98.8
1970	100.0	100.0	100.0	100.0	100.0
1971	104.3	102.2	116.4	97.8	102.1
1972	111.2	110.8	91.0	95.7	112.0
1973	119.4	115.2	99.3	97.5	118.0
1974	134.7	125.1	114.7	101.5	131.7
ETHIOPIE/ETHIOPIA 12/					
1961	1/ 82.7	78.8	100.0	113.3	82.9
1962	83.7	77.7	100.0	94.4	85.7
1963	82.4	77.7	100.0	105.7	88.2
1964	86.9	84.4	100.0	93.3	86.4
1965	90.2	92.2	112.5	75.6	88.9
1966	92.0	94.2	133.3	70.8	88.6
1967	93.3	86.2	133.3	72.9	93.1
1968	93.1	90.3	137.5	98.2	98.7
1969	95.0	93.2	128.6	98.7	98.8
1970	100.0	100.0	100.0	100.0	100.0
1971	101.2	101.3	100.0	95.4	103.2
1972	96.7	93.0	111.1	102.1	104.0
1973	99.0	94.9	111.1	107.9	104.5
1974	107.7	107.8	133.3	108.2	107.0

Sources : Yearbook of National Accounts 1975 et publications nationales/National

Notes : Sous le tableau 2 de l'Annexe I
Under table 2 of Annex I

ues pays africains (1960 - 1975) (suite)/
rican countries (1960 - 1975) (cont'd)

Indice 1970 = 100

ru- n	Commerce/ Wholesale and retail trade	Banques, assurances, affaires immobilières et services fournis aux entreprises/ Finance, insurance, real estate and buisiness services	dont logements occupés par les propriétaires/ of which owner occupied dwellings	Transports entrepôts et communication/ Transport storage and communication	Administration publique/Public administration	Autres services/ Other services
.0	92.8	91.4	101.3	101.8	100.0	93.9
.6	93.3	93.8	99.3	97.0	100.0	98.5
.0	100.0	100.0	100.0	100.0	100.0	100.0
.1	107.0	104.0	101.7	100.4	92.2	101.0
.9	90.0	84.9	79.1	100.8	96.3	98.4
[illegible]	91.2	81.2	80.7	97.4	89.7	102.7
.6	92.1	89.0	84.3	93.3	89.1	83.9
.4	94.3	91.9	89.4	93.9	91.0	96.8
.7	95.9	94.5	92.5	95.8	98.2	91.6
.7	97.6	97.8	97.1	98.8	100.3	100.1
.0	100.0	100.0	100.0	100.0	100.0	100.0
.7	104.1	105.5	105.7	101.7	111.4	98.7
[illegible]	115.2	112.5	113.9	111.7	110.0	101.6
.3	124.8	118.0	118.2	119.7	111.7	102.6
.3	155.8	130.3	128.4	132.4	124.0	108.7
.0	84.6	86.0	93.5	96.6	83.0	84.9
.0	82.9	86.0	93.5	94.1	83.9	84.9
.0	83.8	87.9	94.4	94.9	85.3	84.2
.0	93.1	88.6	93.5	99.1	89.6	95.6
.0	93.9	90.3	93.5	102.0	79.6	55.6
.0	95.6	83.3	86.5	98.7	93.2	53.9
.4	126.6	88.6	90.1	93.3	96.0	93.5
.0	94.3	95.4	97.7	97.0	95.7	95.3
.0	95.0	96.4	99.6	97.1	96.4	95.9
.0	100.0	100.0	100.0	100.0	100.0	100.0
.0	102.5	101.4	101.0	99.7	10011	100.8
.0	101.9	103.9	102.5	99.8	99.1	101.3
.2	111.3	102.8	102.6	99.2	99.3	104.4
.5	119.6	107.2	104.5	100.7	103.1	109.1

blications

Notes aux tableaux 1 et 2 de l'Annexe I/Notes to tables 1 and 2 of Annex I

a/ Produit Intérieur Brut aux prix départ usine sauf indications contraires/ Gross Domestic Product at producers' value unless otherwise stated

b/ Formation brute de capital/Gross capital formation

1/ Produit intérieur brut excluant les droits de douane/Gross Domestic product excluding imports duties

2/ Année commençant le 1er Juillet/Year beginning 1st July

3/ Y compris industries extractives/Including Mining

4/ Y compris Banques, assurances, affaires immobilières, services fournies aux entreprises et autres services/Including Finance, insurance, real estate, buisiness services and other services

5/ Consommation finale seulement/Final consumption only

6/ Formation brute de capital/Gross capital formation

7/ Base 1964 = 100

8/ Y compris Namibie/Including Namibia

9/ Y compris autres services/Including other services

10/ Année commençant le 1er Avril/Year beginning 1 April

11/ Base 1971 = 100

12/ Année terminant le 7 Juillet/Year ending 7 July

13/ Produit intérieur brut au coût des facteurs/Gross domestic product at factor cost

14/ Y compris Banques, assurances, affaires immobilières et services fournis aux entreprises/Including Finance, insurance, real estate and buisiness services.

15/ Source Banque Mondiale avec autorités sénégalaises/Source World Bank with Senegalese authorities

16/ Source Note sur la planification/Source Note on planning

17/ Y compris Banques, assurances, affaires immobilières, services fournis aux entreprises, transports entrepôts et communication et autres services/Including Finance insurance, real estate buisiness services, transport storage and communication and other services.

Tableau/Table / 2 : Prix implicites déflateurs du PIB a/ par emplois finals de biens et services pour quelques pays africains /a (1960-1975)
Implicit price deflator of GDP by type of expenditure for selected african countries (1960 = 1975)

Indice 1970 = 100

Pays et années/Countries & years	Produit intérieur brut/Gross domestic product	Consommation finale b/ et FBC/ Final consumption & GCF b/	Consom. finale privée/ Private Consumption	Consom. finale publique/ Govt. final consumption	Formation brute de capital fixe/Gross fixed capital formation	Exportation de biens et services/ Exports of goods & services	Importations de bien et services/ Imports of goods and services
TUNISIE/TUNISIA							
1960	69.1	71.6	70.5	76.6	68.1	76.7	85.9
1961	74.0	72.4	72.8	74.4	67.3	77.8	71.5
1962	74.8	73.1	72.8	74.6	73.1	79.7	72.3
1963	78.9	77.6	78.5	77.1	74.5	80.2	75.1
1964	80.4	81.0	83.3	80.3	82.4	77.2	81.4
1965	88.2	89.1	88.0	86.8	94.3	91.8	94.4
1966	89.7	89.9	89.5	89.9	91.3	94.2	94.4
1967	93.5	93.5	93.7	92.8	93.5	96.9	96.7
1968	93.7	93.5	93.0	95.3	93.6	95.9	94.3
1969	97.3	97.7	97.9	98.6	96.8	98.0	99.4
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1971	106.7	105.6	106.6	105.9	101.7	109.8	104.8
1972	108.9	108.7	109.0	108.2	107.2	111.5	110.3
1973	117.4	117.1	116.5	114.1	121.0	129.7	126.5
1974	140.7	130.0	126.4	121.9	144.0	228.9	167.6
1975							
LIBYE/LIBYA							
1962	67.7	70.2	75.1	73.4	58.5	...	...
1963	72.5	72.3	76.1	77.5	61.8	...	...
1964	77.2	75.1	79.9	80.5	62.6	...	...
1965	81.0	79.9	83.6	85.1	68.3	...	...
1966	87.8	85.4	87.5	90.7	75.2	...	...
1967	93.1	87.5	91.1	93.2	75.5	...	...
1968	99.0	93.2	94.2	95.5	84.9	...	...
1969	99.5	99.5	100.1	101.0	93.1	...	...
1970	100.0	100.0	100.0	100.0	100.0	...	...
EGYPTE/EGYPT 2/							
1964	87.4	88.8	85.0	96.8	93.3	93.8	97.8
1965	90.4	92.0	89.5	97.8	93.6	94.2	99.8
1966	93.5	94.3	92.1	98.5	95.5	93.6	96.8
1967	96.3	96.6	95.8	98.5	95.0	98.5	93.7
1968	97.2	96.0	95.3	98.2	94.3	104.2	92.3
1969	99.0	97.4	96.8	98.5	98.5	102.2	92.6
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1971	102.2	102.1	102.8	100.6	103.5	103.1	103.6

Tableau/Table / 2 : Prix implicites déflateurs du PIB a/ par emplois finale de biens et services pour quelques pays africains/ (1960-1975)
Implicit price deflators of GDP a/ by type of expenditure for selected african countries (1960 = 1975)

Indice 1970 = 100

Pays et années/Countries & years	Produit intérieur brut/Gross domestic product	Consommation finale et FBC b/ Final consumption and GCF b/	Consom. finale privée/ Private Consumption	Consom. finale publique/ Gvt. final consumption	Formation brute de capital fixe/Gross fixed capital formation	Exportation de biens et services/ Exports of goods and services	Importations de bien et services/ Imports of goods and services
SOUDAN/SUDAN (1960 = 100)							
1960	100.0		100.0	100.0	100.0	100.0	100.0
1961	101.5		100.7	100.8	95.3	95.5	98.8
1962	100.7		101.4	101.2	91.8	90.8	94.6
1963	100.8		102.4	104.6	115.0	87.9	102.0
1964	102.1		105.7	107.5	107.0	95.4	119.0
1965	106.0		110.7	119.5	84.2	91.7	113.0
1966	108.1		111.4	112.9	113.2	90.1	113.3
1967	115.4		117.8	123.2	106.3	91.3	109.9
1968	110.8		121.2	115.6	97.1	93.2	112.2
1969	119.5		130.6	124.6	...	100.4	120.9
SENEGAL 15/							
1960	82.2		80.3	80.2	73.4	90.1	81.7
1961	84.9		83.1	82.9	76.5	90.1	81.7
1962	87.2		81.5	81.5	78.8	90.2	73.2
1963	87.0		82.0	81.8	80.0	89.6	74.1
1964	89.8		86.5	86.3	82.3	89.2	77.7
1965	90.7		87.4	87.3	85.9	88.4	77.7
1966	91.4		86.4	86.3	87.7	80.7	70.1
1967	92.5		86.6	86.5	87.8	90.6	73.5
1968	91.2		92.8	92.7	88.4	75.8	82.2
1969	96.2		101.5	101.2	93.6	85.0	[illegible]
1970	100.0		100.0	100.0	100.0	100.0	100.0
1971	103.4		104.6	104.4	100.0	109.2	110.5
1972	107.7		111.4	111.3	103.7	109.2	118.1
1973	116.1		120.8	121.7	114.8	132.6	142.2
1974	135.9		133.9	133.5	139.3	241.6	214.7
1975	165.0		166.2	168.3	171.4	200.5	205.0
MALI 16/							
1969	94.4		94.1	100.0	88.0	98.5	100.0
1970	100.0		100.0	100.0	100.0	100.0	100.0
1971	105.1		105.7	104.7	94.7	106.4	104.1
1972	105.7		109.3	104.7	91.6	102.7	105.3
1973	112.7		111.6	106.7	127.2	109.6	118.5

Tableau/Table 2 : Prix implicites déflateurs du PIB a/ par emplois finale de biens et services pour quelques pays africains/ (1960 - 1975)
Implicit price deflators of GDP a/ by type of expenditure for selected african countries (1960 - 1975)

Indice 1970 = 100

Pays et années/Countries & years	Produit intérieur brut/Gross domestic product	Consommation finale et FBC/ b/ Final consumption and GCF b/	Consommation finale privée/Private consumption	Consommation publique/Govt. final consumption	Formation brute de capital fixe/Gross fixed capital fromation	Exportations de biens et services/Exports of goods and services	Importations de biens et services/Imports of goods and services
COTE D'IVOIRE/IVORY COAST		5/					
1960	76.4	82.8	...	...	79.4	56.6	74.4
1965	83.5	90.6	...	...	86.7	61.8	81.3
1966	84.3	89.9	...	...	86.3	68.6	85.9
1967	89.0	92.8	...	...	86.3	75.0	85.4
1968	91.0	94.0	...	...	86.2	77.9	87.3
1969	95.9	96.2	96.3	96.3	92.3	90.4	95.8
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1971	101.4	...	102.7	104.5	106.4	97.1	104.9
1972	102.7	...	105.8	109.4	112.8	95.9	111.0
1973	116.3	...	115.3	113.4	116.2	121.5	122.2
1974	149.3	...	143.4	133.8	141.6	169.2	166.9
LIBERIA							
1964	97.6	86.1	91.1	107.8	93.5	113.0	90.2
1965	97.9	92.7	91.0	113.2	93.0	101.1	92.4
1966	96.3	91.3	89.2	111.1	95.1	102.2	94.6
1967	96.8	92.8	90.6	111.1	95.8	101.1	95.7
1968	98.5	90.9	96.2	113.2	96.4	105.4	92.4
1969	101.1	88.5	96.5	115.6	96.1	112.0	90.2
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1971	100.4	98.7	101.5	110.0	100.9	108.7	108.7
1972	105.0	109.0	102.9	120.9	116.6	108.7	118.5
1973	118.3	124.5	120.9	139.7	141.9	123.9	139.1
HANA							
1960	48.3	49.5	46.7	53.4	55.4	58.2	63.9
1961	49.8	51.4	49.9	56.4	58.2	51.5	64.7
1962	50.8	54.7	54.6	57.1	56.0	43.1	61.2
1963	54.2	57.4	57.5	58.5	56.0	44.2	54.4
1964	59.7	62.4	64.2	63.7	58.2	53.1	66.5
1965	69.8	76.7	81.1	66.2	60.0	43.9	68.7
1966	77.7	84.9	90.5	80.9	65.8	41.7	65.8
1967	75.7	82.3	82.9	85.1	76.6	53.5	82.2
1968	85.1	87.7	87.7	89.5	85.0	76.2	87.6
1969	94.6	95.6	96.4	93.8	92.3	88.3	93.3
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1971	104.8	110.0	113.2	102.9	100.6	81.4	107.7
1972	121.3	128.5	132.0	119.2	120.4	102.4	135.6
1973	143.1	147.6	149.1	130.0	132.1	134.9	142.3
1974	182.3	180.9	178.2	173.5	175.5	185.4	165.5

Tableau/Table 2 : Prix implicites déflateurs du PIB a/ par emplois finale de biens et services pour quelques pays africains/ (1960 - 1975)
Implicit price deflators of GDP a/ by type of expenditure for selected african countries (1960 - 1975)

Indice 1970 = 100

Pays et années/Countries and years	Produit intérieur brut/Gross domestic product	Consommation finale et FBC/ b/ Final consumption and GCF b/	Consommation finale privée/Private final consumption	Consommation publique/Govt. final consumption	Formation brute de capital fixe/Gross fixed capital formation	Exportations de biens et services/Exports of goods and services	Importations de biens et services/Imports of goods and services
CHAD/CHAD		5/					
1968	78.8	79.4	...	...	95.1	88.5	80.9
1970	100.0	100.0	...	...	100.0	100.0	100.0
AIRE							
1963	23.1*					...	...
1964	23.0*					...	...
1966	36.8*					...	...
1967	55.8*		...	...	...	...	...
1968	84.8		90.1	81.0	85.1 6/	85.7	90.8
1969	96.0		94.6	94.3	89.7 6/	100.6	93.7
1970	100.0		100.0	100.0	100.0	100.0	100.0
1971	99.6		108.5	114.6	107.5	82.4	103.3
1972	106.8		130.4	126.7	112.9	76.3	113.5
1973	134.9		172.1	133.6	127.3	108.7	137.2
1974	152.0		198.6	162.5	139.0	134.6	171.9
AMBIE/ZAMBIE							
1960	92.0	80.1	84.7	83.3	68.8	...	...
1961	89.2	81.4	84.2	87.6	71.3	...	...
1962	88.9	84.3	87.5	92.7	72.6	...	...
1963	91.2	85.4	87.0	94.5	75.4	...	...
1964	93.8	86.6	89.4	89.1	78.9	...	...
1965	66.1	83.1	77.8	82.1	74.8	58.9	83.9
1966	82.2	90.8	84.7	130.8	82.8	84.2	86.1
1967	88.3	95.2	88.9	94.8	85.1	86.9	89.2
1968	91.4	103.4	95.7	98.5	96.5	92.8	94.0
1969	114.5	104.0	98.0	105.4	100.2	117.0	91.6
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1971	94.4	115.9	109.3	109.4	107.5	82.0	100.0
1972	97.5	120.7	114.6	112.9	111.8	84.3	105.5
1973	115.7	128.3	122.5	125.3	114.8	119.0	111.5
1974	129.1	142.2	133.4	134.4	138.8	136.3	125.7
1975	106.2	161.4	147.3	149.5	161.8	81.7	163.8
1976	119.1	178.9	178.4	171.4	181.8	96.9	196.7

Tableau/ Table / 2 : **Prix implicite déflateurs du PIB[a] par emplois finals de biens et services pour quelques pays africains/ (1960-1975)**
Implicit price deflators of GDP[a] by type of expenditure for selected african countries (1960 - 1975)

Indice 1970 = 100

Pays et années/Countries and years	Produit intérieur brut/Gross domestic product	Consommation finale et FBC/ Final consumption and GCF	Consommation finale privée/ Private final consumption	Consommation publique/ Govt. final consumption	Formation brute de capital fixe/Gross fixed capital formation	Exportations de biens et services/ Exports of goods and services	Importations de biens et services/ Imports of goods and services
MALAWI							
1960	74.0*	...	84.0*	69.5*	84.4*	...	...
1961	73.6*	...	86.4*	76.0*	84.4*	...	...
1962	76.4*	...	87.2*	82.3*	84.4*	...	...
1963	80.6*	...	90.9*	82.7*	88.2*	...	...
1964	83.1	83.8	90.0	89.9	90.0	...	...
1965	86.0	86.5	92.9	83.9	92.9	...	...
1966	88.5	89.1	91.5	84.8	91.5	...	...
1967	84.5	87.0	91.8	83.9	91.8	...	...
1968	89.5	91.8	101.4	88.6	101.4	...	...
1969	91.9	93.8	96.1	92.6	96.1	...	...
1970	100.0	100.0	100.0	100.0	100.0	...	...
1971	107.9	108.5	105.9	109.0	105.9	...	...
1972	109.0	109.8	107.9	112.9	107.9	...	...
MAURICE/MAURITIUS[7]							
1960	97.7	98.2	99.2	96.0	96.5	...	...
1961	94.0	98.4	98.3	99.0	98.1	...	...
1962	96.4	99.2	99.0	99.1	100.0	...	...
1963	108.4	99.5	98.2	99.1	105.3	...	...
1964	100.0	100.0	100.0	100.0	100.0	...	...
1965	92.6	102.0	101.8	100.0	104.7	...	...
1966	98.4	104.0	104.5	101.3	104.7	...	...
KENYA							
1964	91.4	91.4	93.1	90.8	84.7	93.5	93.5
1965	90.9	91.7	94.2	86.3	86.7	93.5	96.3
1966	93.6	93.6	95.9	86.1	91.4	95.3	95.3
1967	94.0	94.5	94.9	88.6	97.4	93.5	95.3
1968	96.2	97.3	98.2	92.4	98.1	93.5	97.2
1969	97.6	99.5	100.4	95.0	99.7	92.5	98.1
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1971	104.3	106.5	105.6	106.6	107.4	101.9	109.3
1972	111.2	114.3	111.3	110.8	124.2	111.2	122.4
1973	119.4	122.3	125.9	110.4	136.5	129.0	140.2
1974	134.7	149.3	172.4	127.5	161.0	168.2	225.2

Tableau/ Table / 2 : **Prix implicites déflateurs du PIB[a] par emplois finale de biens et services pour quelques pays africains/ (1960-1975)**
Implicit price deflators of GDP[a] by type of expenditure for selected african countries (1960 - 1975)

Indice 1970 = 100

Pays et années/Countries and years	Produit intérieur brut/Gross domestic product	Consommation finale et FBC[b]/ Final consumption and GCF[b]	Consommation finale privée/ Private final consumption	Consommation publique/ Govt. final consumption	Formation brute de capital fixe/Gross fixed capital formation	Exportations de biens et services/ Exports of goods and services	Importations de biens et services/ Imports of goods and services
RHODESIE DU SUD/ SOUTHER RHODESIA							
1960	88.9*	...	86.3*	83.2*	83.6*	97.7*	84.9*
1961	89.5*	...	88.1*	88.2*	85.7*	...	...
1962	89.4*	...	89.1*	92.8*	88.7*	...	...
1963	92.4*	...	90.6*	97.5*	95.2*	...	...
1964	89.2*	...	95.2*	105.0*	89.4*	92.9*	99.1*
1965	91.3	87.4	88.3	85.2	85.5	99.9	86.8
1966	89.3	90.2	90.7	89.5	87.9	91.0	95.6
1967	90.8	92.2	92.6	89.5	92.1	91.0	95.5
1968	93.7	94.1	94.6	93.1	93.5	92.7	94.0
1969	97.0	96.6	96.1	98.7	95.2	96.9	95.7
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1971	102.8	103.9	101.9	112.5	106.8	101.8	106.6
1972	107.1	108.5	105.0	124.6	113.1	100.9	104.3
1973	113.5	114.4	109.4	141.7	119.0	...	...
1974	124.0	126.0	120.0	161.3	131.8	...	...
AFRIQUE DU SUD[8]/ SOUTH AFRICA[8]							
1960	74.0	72.6	73.5	63.1	73.3	90.8	87.2
1961	75.5	73.4	74.9	64.2	73.7	91.6	86.5
1962	76.6	74.8	76.3	65.5	75.9	91.1	87.3
1963	78.7	77.2	77.9	69.8	77.7	92.9	88.6
1964	81.2	79.8	80.4	73.0	80.1	94.7	89.3
1965	83.2	82.7	83.5	74.8	83.5	96.0	93.5
1966	86.7	86.4	86.8	80.5	88.0	97.2	97.4
1967	89.7	89.6	90.1	82.5	91.4	95.7	95.8
1968	92.4	91.7	92.4	85.3	93.1	96.0	93.4
1969	96.2	95.4	95.9	91.4	94.8	100.5	96.8
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1971	105.9	108.1	107.6	110.7	105.8	103.0	104.0
1972	115.0	115.4	114.9	114.4	115.8	117.3	118.1
1973	135.7	128.3	126.8	127.5	127.9	153.0	128.8
1974	151.3	144.1	140.7	143.3	146.6	205.5	165.0
1975	167.7	164.2	157.5	163.8	174.7	222.9	207.8

Sources : Yearbook of National Accounts 1975 et publications nationales/ National publications

Tableau/ Table/ 3 : Prix implicites déflateurs du PIB[a/] monétaire et non monétaire pour quelques pays africains (1960 - 1975)/
Implicit price deflators of monetary and non monetary GDP for selected african countries (1960 - 1975)

N.M = Non monétaire/non monetary — M = monétaire/monetary — Indice 1970 = 100

ays et années/ ountries and ears	PIB - GDP			Agriculture[1/]		Transport d'eau/ Water carrying		Batiments et construction/Bldg. & construction		Loyers imputés/Imputed rents	
	Total	N.M	M	N.4	M	N.M	M	N.M	M	N.M	M
AIRE											
1970	100.0	100.0	100.0	100.0	100.0	-	-	100.0	100.0	-	-
1971	99.7	102.6	99.4	100.0	97.3	-	-	114.5	114.9	-	-
1972	106.8	101.5	107.4	100.0	103.2	-	-	109.2	109.5	-	-
1973	134.9	127.4	135.7	130.0	153.8	-	-	115.0	115.3	-	-
1974	152.0	127.0	154.4	130.0	168.9	-	-	124.8	135.0	-	-
1975											
AMBIE/ZAMBIA											
1965	73.6	78.4	77.3	78.4	96.7	-	-	-	-	-	-
1966	78.0	78.8	78.0	78.8	117.1	-	-	-	-	-	-
1967	84.6	81.0	84.8	81.0	111.1	-	..	-	-	-	-
1968	89.2	92.1	89.0	92.1	87.5	-	-	-	-	-	-
1969	92.0	99.5	91.6	99.5	62.3	-	-	-	-	-	-
1970	100.0	100.0	100.0	100.0	100.0	-	-	-	-	-	-
1971	94.5	106.6	93.6	106.6	121.7	-	-	-	-	-	-
1972	96.0	107.6	95.0	107.6	115.7	-	-	-	-	-	-
1973	118.2	109.4	118.7	109.4	122.9	-	-	-	-	-	-
1974	127.4	113.3	127.8	117.3	140.6	-	-	-	-	-	-
1975	104.6	128.6	102.6	128.6	156.6	-	-	-	-	-	-
ALAWI											
1964	83.5	85.8	82.1	-	-	-	-	-	-	-	-
1965	86.2	89.9	83.9	-	-	-	-	-	-	-	-
1966	88.9	89.5	89.0	-	-	-	-	-	-	-	-
1967	86.5	86.8	86.6	-	-	-	-	-	-	-	-
1968	90.9	88.0	93.4	-	-	-	-	-	-	-	-

Tableau/ Table/ 3 : Prix implicites déflateurs du PIB[a/] monétaire et non monétaire pour quelques pays africains (1960 - 1975)/
Implicit price deflator of monetary and non monetary GDP for selected african countries (1960 - 1975)

N.M = Non monétaire/non monetary — M = monétaire/monetary — Indice 1970 = 100

ays et années/ oun ries and ears	PIB[a/] - GDP[a/]			Agriculture[1/]		Transport d'eau/ Water carrying		Batiments et construction/Bldg. & construction		Loyers imputés/ Imputed rents	
	Total	N.M	M	N.M	M	N.M	M	N.M	M	N.M	M
ALA I (suite)											
1968											
1968	90.9	88.0	93.4	-	-	-	-	-	-	-	-
1969	92.9	93.6	92.6	-	-	-	-	-	-	-	-
1970	100.0	100.0	100.0	-	-	-	-	-	-	-	-
1971	108.4	111.6	106.6	-	-	-	-	-	-	-	-
1972*	109.8*	113.3*	108.0*	-	-	-	-	-	-	-	-
ANZANIE/TANZANIA	3/				4/				4/		
1964	93.1	88.3	95.3	88.3	100.8	-	-	81.0	71.6	81.2	...
1965	91.8	90.2	92.5	90.2	95.6	-	-	85.0	75.2	85.8	...
1966	93.5	92.5	93.9	92.5	94.8	-	-	90.5	80.9	90.5	...
1967	92.9	91.7	93.4	91.7	92.0	-	-	92.2	83.2	92.7	...
1968	94.2	93.5	94.4	93.5	92.2	-	-	57.2	86.2	96.6	...
1969	96.1	96.2	96.0	96.2	94.5	-	-	97.1	88.7	97.5	...
1970	100.0	100.0	100.0	100.0	100.0	-	-	100.0	100.0	100.0	...
1971	103.3	106.3	102.1	106.9	104.6	-	-	104.5	105.6	104.4	...
1972	111.7	112.9	111.2	112.5	111.5	-	-	113.1	111.1	114.5	...
1973	122.6	121.3	123.1	121.7	124.5	-	-	121.6	118.0	119.9	...
1974	142.6	143.2	142.6	145.4	154.8	-	-	136.4	131.5	137.1	...
GANDA/UGANDA	3/										
1963	73.9	64.8	78.4	83.7	77.1	-	-	63.1	59.4	76.7	70.1
1964	78.2	69.7	82.3	68.6	81.6	-	-	66.8	82.6	81.0	73.1
1965	86.3	83.0	87.7	82.3	86.7	-	-	85.0	71.7	89.4	75.4
1966	85.1	79.6	87.7	78.5	86.4	-	-	78.9	72.0	90.3	78.3
1967	84.3	81.6	85.4	80.7	80.1	-	-	78.9	72.9	91.6	81.3
1968	87.3	80.3	90.7	78.8	86.8	-	-	78.9	76.5	94.8	85.0
1969	89.7	82.9	92.8	81.1	87.1	-	-	81.6	82.0	100.7	89.5
1970	100.0	100.0	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0

Tableau/ Table / 3 : Prix implicites déflateurs du PIB[a] monétaire et non monétaire pour quelques pays africains (1960 - 1975)/ Implicit price deflators of monetary and non monetary GDP[a] for selected african countries (1960 - 1975)

N.M = Non monétaire/non monetary M = monétaire/monetary Indice 1970 = 100

ays et années/ Countries and years	PIB[a] - GDP[a]			Agriculture[1]		Transport d'eau/ Water carrying		Bâtiments et construction/Bldg. construction		Loyers imputés/ imputed rents	
	Total	N.M	M	N.M	M	N.M	M	N.M	M	N.M	M
ENYA											
1964	93.5[3]	91.2	82.0	100.1	101.0	64.3	91.4[2]	72.1	71.8	72.1	81.8
1968	96.9	94.5	85.0	98.5	100.3	90.9	98.7	95.1	89.8	95.0	91.0
1969	97.9	95.9	86.6	99.8	93.2	94.9	98.4	95.3	92.8	97.4	97.3
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1971	104.0	99.0	91.9	101.2	102.1	104.6	96.1	101.6	103.2	101.6	108.6
1972	110.7	108.1	97.1	113.5	108.6	107.7	92.3	103.3	111.3	103.2	118.8
1973	115.6	109.8	102.9	115.2	116.2	110.3	94.3	104.8	123.2	104.8	125.5
1974	128.5	115.3	115.2	121.8	130.1	113.3	95.7	106.6	150.7	106.6	139.3

---

[1] Agriculture, sylviculture, pêche - Agriculture, forestry, fishing
[2] Electricité, gaz et eau - Electricity, gas and water
[3] PIB aux coûts des facteurs - DGDP at factor cost
[4] Total monétaire non monétaire - Total monetary and non monetary

[a] Produit intérieur brut aux valeurs d'acquisitions sauf indications contraires/ Gross domestic product at purchasers' values unless otherwise stated

Sources : CEA à partir de : Zaïre : Banque du Zaïre Rapport annuel 1974
ECA from : Zambie : 1965 - 1970 National accounts 1970 1970 - 1975 Digest of Statistics August 1976
Malawi : National Accounts 1964 - 1972
Tanzanie : The Economic Survey 1974/1975
Ouganda : Statistical Abstract 1973
Kenya : Statistical Abstract 1975

ANNEXE/ANNEX II

RELATIONS EMPIRIQUES ENTRE INDICES DE PRIX IMPLICITES ET ANALYTIQUES POUR QUELQUES PAYS AFRICAINS

(Coefficients de variation) des indices de prix

EMPIRICAL RELATIONSHIPS BETWEEN IMPLICIT AND ANALYTICAL PRICES FOR SELECTED AFRICAN COUNTRIES

(Coefficients of variation) of price indices

Tableau/Table 1 : Comparaison entre prix implicites du PIB total, prix à la consommation et prix de gros pour quelques pays africains/
Comparison between implicit prices of total GDP, consumer and whole sale prices for selected African countries

Pays et années Countries and years	PIB-GDP	Prix à la consommation/ Consumer prices	Prix de gros/ Wholesale prices
Tunisie/Tunisia			
1960-74	20.08	15.72	21.77
Libye/Libya			
1962-70	14.27	11.76 1/	-
Egypte/Egypt			
1964-73	5.68	10.11	11.24
Sierra Leone			
1963-73	12.04	13.20	-
Libéria			
1964-73	6.45	11.46	-
Ghana			
1968-74	28.55	21.83	30.35
Nigéria			
1960-73	19.18	21.90	-
Zaïre			
1960-74	21.67	29.01	20.50 4/
Zambie/Zambia			
1965-74	17.56	18.79 2/	29.87 2/
Tanzanie/Tanzania			
1964-74	33.11	18.85	-
Ouganda/Uganda			
1960-71	12.99	19.64	-
Kenya			
1964-74	13.29	14.44	-
Ethiopie/Ethiopia			
1961-74	8.08	12.88 3/	10.93 3/
Moyenne-Mean 5/	16.38	17.12	20.79

1/ 1964-70, 2/ 1968-74, 3/ 1963.74, 4/ Indice non pondéré/Unweighted index, 5/ Pondéré par le nombre d'observations/Weighted by number of observations

'ableau / 2 : Comparaison entre prix implicites du PIB total et par branches d'activité (com
'able Comparison between implicitprices of total GDP and by kind of economic activit

ays et années/ ountries and years	PIB / GDP	Agriculture	Industries extractives/ Mining	Electricité, eau et gaz/ Electricity, gas and water	Industries manufacturière/ Manufacturing	Construction	Comm Whol and tr
unisie/Tunisia 1960-74	20.08	21.44	62.43	3.98	21.54	20.06	10
ibye/Libya 1962-70	14.27	28.39	12.60	28.01	6.21	33.69	11
gypte/Egypt 1964-73	5.68	6.03	10.18	6.31	5.58	11.95	[illegible]
ierra Leone 1963-73	12.04	13.85	24.02	33.32	12.41	5.01	14
ibéria 1964-73	5.45	9.91	6.13	12.49	7.54	9.75	7
hana 1958-74	28.55	34.59	48.30	22.37	27.92	21.67	27
igéria 1960-73	19.18	23.88	34.92	17.63	15.27	12.80	20
aïre 1968-74	21.67	21.82	33.39	3.45	14.82	15.67	24
mbie/Zambia 1965-74	17.56	16.49	37.94	10.43	32.16	23.11	13
nzanie/Tanzania 1964-74	33.11	17.84	30.44	5.52	19.98	20.09	20
uganda/Uganda 1960-71	12.99	17.26	43.82	9.72	7.57	15.46	12
enya 1964-74	13.29	8.31	7.49	7.35	13.95	19.47	10
thiopie/Ethiopia 1961-74	8.08	10.01	13.45	14.05	8.61	11.84	13
oyenne/Mean 1/	16.38	17.68	28.05	13.43	14.90	16.92	15

1/ Pondéréepar le nombre d'observations / Weighted by number of observations

ique pour quelques pays africains/
for selected African countries

ce/ le etail e	Banques, assurance, affaires immobilière et services fournis/ Finance, insurance, real estate and buisiness services	dont logements occupés par les propriétaires/ of which owner occupied dwellings	Transports entrepôts et communications/Transport storage and communications	Administration publique/ Public administration	Autres services/ Other services
35	7.40	-	9.42	16.01	12.07
28	20.62	21.35	10.99	14.84	12.60
50	4.52	-	3.46	1.57	1.57
32	10.30	-	10.23	1.87	1.87
44	19.32	16.38	4.09	9.21	3.78
00	10.35	-	18.69	20.51	25.78
84	6.65	-	6.55	4.73	6.65
96	9.21	-	19.36	24.89	6.21
57	25.09	-	25.39	22.76	25.09
19	15.81	15.67	8.45	8.02	88.02
12	14.03	9.32	3.07	0.26	17.82
78	14.86	16.19	11.75	10.84	6.53
04	8.32	5.46	2.64	8.09	18.48
6	13.09	14.13	10.31	11.05	11.27

Tableau
Table 3 : Comparaison entre prix agricoles implicites, prix agricoles à l'exportation, prix à la consommation des produits alimentaires et indice combiné pour quelques pays africains
Comparison between agricultural implicit prices, agricultural export prices, food consumer prices and combined index for selected african countries

Coefficients de variation/Coefficients of variation

Pays et années/ Countries and Years	Prix implicites des produits agricoles/Agricultural implicit price (1)	Prix à l'exportation des produits agricoles/Agricultural export price (2)	Prix à la consommation des produits alimentaires/Food consumer price (3)	Indice combiné pondéré 4/ Weighted combined index 4/ (4)
Tunisie/Tunisia 1960-74	21.44	22.76 1/	18.60	19.55
Libye/Libya 1962-70	20.39	26.92	16.94 2/	17.02
Egypte/Egypt 1964-73	6.03	16.47	14.78	15.25
Sierra Leone 1963-73	13.85	19.90	15.05	15.85
Libéria 1964-73	9.91	36.69	11.02	22.37
Ghana 1968-74	34.59	45.36	28.37	34.32
Nigéria 1960-73	23.88	13.53	31.23	29.02
Zaïre 1968-74	21.88	27.87	31.36	30.82
Zambie/Zambia 1965-74	16.49	15.57	18.73	18.62
Tanzanie/Tanzania 1964-74	17.84	22.15	23.08	22.74
Ouganda/Uganda 1960-71	17.26	15.24	23.40	18.14
Kenya 1964-74	8.31	20.96	11.64	14.94
Ethiopie/Ethiopia 1961-74	10.01	16.23	14.38 3/	14.60
Moyenne-Mean 5/	17.80	23.05	19.97	21.02

1/ 1961-74,
2/ 1964-70
3/ 1963-74
4/ Pondéré par les parts relatives en 1970 des produits agricoles exportés pour (2) et de produits agricoles produits pour (3) dans la valeur ajoutée totale de l'agriculture — Weighted by the relative parts in 1970 of exports of agricultural products for (2) anf for agricultural production for (3) in the total value added of agriculture
5/ Pondérée par le nombre d'observations/Weighted by number of observations

Tableau / Table / 4 : Comparaison entre prix implicites et prix à l'exportation des produits miniers pour quelques pays africains/ Comparison between implicit prices and export prices of mining products

Pays et années 1/ Countries and years 1/	Coefficients de variation/Coefficients of variation	
	Prix implicites des produits miniers/ Implicit price of mining products	Prix à l'exportation des produits miniers/ Mining export prices
Tunisie/Tunisia 1960-74	62.43	73.44 2/
Libye/Libya 1963-70	12.60	8.98
Egypte/Egypt 1964-73	10.10	8.10
Sierra Leone 1963.73	24.08	29.95
Libéria 1964-73	6.13	17.79
Ghana 1968-74	48.39	31.43
Nigéria 1960-73	34.93	24.30
Zaïre 1968-74	33.39	21.37
Zambie/Zambia 1965-74	37.94	37.89
Moyenne-Mean 3/	29.94	29.25

1/ Non compris Tanzanie, Ouganda, Kenya et Ethiopie dont les exportation de produits miniers sont négligeables/ Not included Tanzania, Uganda, Kenya and Ethiopia for which the exports of mining products are negligeable

2/ 1961-74

3/ Pondérée par le nombre d'observation/ Weighted by number of observations

Tableau/Table 5 : Comparaison entre prix implicites de l'electricité, gaz et eau et prix à la consommation du chauffage et éclairage pour quelques pays africains/ Comparison between implicit electricity, gas and water and consumer prices of fuel and power for selected african countries

	Coefficients de variation/Coefficient of variation	
Pays et années/ Countries and years	Prix implicites de l'electricité, gaz et eau/ Implicit prices of electricity, gas and water	Prix à la consommation du chauffage et éclairage/ Consumer prices of fuel and power
Tunisie /Tunisia 1960-74	3.98	10.97
Libye/Libya 1962-70	28.01	13.28 1/
Egypte/Egypt 1964-73	6.31	5.00 2/
Sierra Leone 1963-73	33.32	12.30
Libéria 1964-73	12.49	4.96
Ghana 1968-74	22.37	23.57
Nigéria 1960-73	17.61	12.92
Zaïre 1968-74	3.45	15.22
Tanzanie/Tanzania 1964-74	10.43	19.94
Ouganda/Uganda 1960-71	5.52	5.83 3/
Kenya 1964-74	9.72	17.83
Ethiopie/Ethiopia 1961-74	7.25	12.38 4/
Moyenne-Mean 5/	13.36	12.85

1/ 1964-73, 2/ 1958-73, 3/ 1965-71, 4/ 1963-74

5/ Pondéré par le nombre d'observations/ Weighted by number of observations

Tableau/Table 6 : Comparaison entre prix implicites des industries manufacturières, prix à la consommation des produits alimentaires et de l'habillement, prix de gros et prix à l'importation pour quelques pays africains/
Comparison between implicit prices of manufacturing, consumer prices of food and and clothing and import prices for selected african countries

Pays et années/ Countries and years	Coefficients de variation/Coefficients of variation				
	Prix implicites des industries manufacturières/ Implicit prices of manufacturing	Prix à la consommation des produits alimentaires/Consumer prices of food	Prix à la consommation de l'habillement/ Consumer prices of clothing	Prix de gros/ Wholesale prices	Prix à l'importation [1] Import prices [1]
Tunisie/Tunisia 1960-74	21.54	1860	9.84[4]	21.77	24.47
Libye/Libya 1962-70	6.21	16.94[2]	3.26[3]	-	4.07
Egypte/Egypt 1964-73	5.58	14.78	4.44[5]	11.24	5.81
Sierra Leone 1963-73	12.41	15.05	10.38	-	8.50
Libéria 1964-73	7.64	11.02	18.10	-	22.78
Ghana 1958-74	27.92	28.37	18.99	30.35	27.25
Nigéria 1960-73	15.27	31.23	21.79	-	13.90
Zaïre 1968	14.82	31.36	25.32	30.58[7]	24.09
Zambie/Zambia 1968-74	32.16	18.73	21.34	29.87[5]	31.32
Tanzanie/Tanzania 1964/74	19.98	23.08	30.90	-	45.80
Ouganda/Uganda 1960-71	7.57	23.40	25.94	-	7.43
Kenya 1964.74	13.95	11.64	19.67	-	32.93
Ethiopie/Ethiopia 1961-74	8.61	14.38[2]	17.51[3]	10.93[6]	10.93
Moyenne/Mean [8]	14.90	19.97	17.45	20.79	19.94

[1] Totale/total, [2] 1964-70, [3] 1963-74, [4] 1962-74, [5] 1968-73

[6] Prix de gros à l'importation/ Wholesale price for imports

[7] Indice non pondéré/Unweighted index

[8] Pondérée par le nombre d'observations/weighted by number of observations

Tableau/Table 7 : Comparaison entre prix implicites de la construction et prix de gros des matériaux de construction pour quelques pays africains/
Comparison between implicit prices of construction and wholesale price of building materials for selected African countries

Pays et années/ Countries and years	Coefficients de variation/Coefficients of variation Prix implicites de la construction/Implicit price of construction	Prix de gros des matériaux de construction/ Wholesale prices of bldg. materials
Egypte/Egypt 1964-73	11.96	8.74
Zaïre 1968-74	15.67	10.54[1]
Zambie/Zambia 1965-74	23.11	25.56
Moyenne/Mean[2]	16.96	16.20

[1] 1970-74, [2] Pondérée par le nombre d'observations/ Weighted by number of observations

Tableau/Table 8 : Comparaison entre prix implicites des logements occupés par leur propriétaire et prix de loyer de l'indice des prix à la consommation pour quelques pays africains/
Comparison between implicit price of owner occupied dwellings and consumer price of rent for selected countries

Pays et années/ Countries and years	Coefficients de variation/Coefficients of variation Prix implicites des logements occupés par leur propriétaire/ Implicit prices of owner occupied dwellings	Prix du loyer/ consumer prices of rent
Libye/Libya 1962-70	21.35	13.96[1]
Libéria 1964-73	16.38	15.96
Tanzanie/Tanzania 1964-74	15.97	2.97[2]
Kenya 1964-74	16.19	14.47[3]
Moyenne/Mean [4]	17.40	11.84

[1] 1964-70, [2] 1969-74, [3] 1970-74

[4] Pondérée par le nombre d'observations/ Weighted by number of observations

Tableau/Table 9 : Comparaison entre prix implicites des services et prix à la consommation totale pour quelques pays africains/
Comparison between implicit prices of services and total consumer prices for selected african countries

Coefficients de variation/Coefficients of variation

Pays et années/ Countries and years	Prix implicites de services/Implicit prices of services 1	Prix à la consommation totale/Total consumer prices 2	Ecarts en %/ Deviation in % 3 = 2 - 1
Tunisie/Tunisia 1960-74	11.22	15.72	4.50
Libye/Libya 1962-70	14.57	11.76[1]	-2.81
Egypte/Egypt 1964-73	1.93	10.11	8.18
Sierra Leone 1963-73	9.04	13.20	4.16
Libéria 1964-73	7.09	14.46	7.37
Ghana 1958-74	22.35	21.83	-0.52
Nigéria 1960-73	10.02	21.90	11.88
Zaïre 1968-74	21.58	29.01	7.43
Zambie/Zambia 1965-74	20.25	18.76	-1.49
Tanzanie/Tanzania 1964.74	12.77	18.85	6.08
Ouganda/Uganda 1960-71	8.65	19.64	10.99
Kenya 1964-74	11.77	14.44	2.67
Ethiopie/Ethiopia 1961-74	9.35	12.88[2]	3.53
Moyenne/Mean[3]	12.35	17.12	2.94

[1] 1964-70, [2] 1963-74

[3] Pondérée par le nombre d'observation/
Weighted by number of observations

Tableau/ Table / 10 : Comparaison entre prix implicites du PIB par emplois finals de biens et services/ Comparison between implicit prices of GDP by type of expenditure for selected African countries

Pays et années/ Countries and years	Coefficients de variation/Coefficients of variation					
	PIB/ GDP	Consommation finale privée/Final private consumption	Consommation finale des administrations publiques/Final government consumption	Formation brute de capital fixe/ Gross fixed capital formation	Exportations de biens et services/Exports of goods and services	Importation de biens et services/Imports of goods and services
Tunisie/Tunisia 1960-74	20.08	17.77	16.18	21.76	36.66	24.61
Libye/Libya 1962-70	14.27	10.91	11.21	19.26	...	...
Egypte/Egypt 1964-73	5.23	6.02	1.21	3.74	4.42	4.14
Libéria 1964-73	6.45	9.61	9.12	14.86	6.87	15.57
Ghana 1958/74	28.55	26.65	16.06	27.07	35.06	24.93
Zaïre 1968-74	21.62	32.97	23.69	17.90	20.03	25.25
Zambie/Zambia 1965-74	17.56	25.81	23.51	28.74	21.86	42.74
Kenya 1964-74	13.29	21.52	13.20	21.72	21.80	33.77
Moyenne/Mean 1/	15.88	18.91	14.26	19.38	20.96	24.43

1/ Pondérée par le nombre d'observations/ Weighted by number of observations

Tableau/Table 11 : Comparaison entre prix implicites de la consommation finale (CF) et de la formation brute de capital (FBC) et prix à la consommation total pour quelques pays africains/ Comparison between implicit prices of final consumption (FC) gross capital formation (GCF) and total consumer prices for selected african countries

	Coefficients de variation/Coefficients of variations		
Pays et années/ Countries and years	Prix implicites de la CF et de la FBC/ Implicit prices of FC and GCF	Prix à la consommation/Total consumer prices	Ecarts en %/ Deviation in %
	(1)	(2)	(3) = (2) - (1)
Tunisie/Tunisia 1964-74	18.34	15.72	-2.62
Libye/Libya 1962-70	13.26	11.76 1/	-1.50
Egypte/Egypt 1964-73	4.43	10.11	5.68
Libéria 1964-73	11.88	14.46	2.58
Ghana 1968-74	27.43	21.83	-5.60
Zaïre 1968-74	26.17	29.01	2.84
Zambie/Zambia 1965-75	24.75	18.75 2/	-6.00
Kenya 1964-74	16.59	14.44	-2.15
Moyenne-Mean 3/	17.85	17.01	-0.85

1/ 1964-74, 2/ 1960-74, 3/ Pondérée par le nombre d'observations/
Weighted by number of observations

Tableau/Table 12 : Comparaison entre prix implicites des exportations et importations de biens et services moyennes du commerce extérieur pour quelques pays africains/ Comparison between implicit exports and imports of goods and services and unit values of external trade for selected African countries

	Coefficients de variation/Coefficients of variation					
Pays et années/ Countries and years	Prix implicites des exportations de biens et services/Implicit prices of exports of goods and services	Valeurs moyennes des exportations/Unit values of exports	Ecarts en %/ Deviation in %	Prix implicites des importations de biens et services/Implicit prices of imports of goods and services	Valeurs moyennes des importations/ Unit value imports	Ecarts en % Deviations in %
	1	2	3 = 2-1	4	5	6 = 5-4
Tunisie/Tunisia						
1960-74	36.66	50.41	13.75	24.51	24.37	-0.14
Egypte/Egypt						
1961-73	4.43	[illegible]	4.07	4.14	5.81	1.67
Libéria						
1964-73	6.87	5.12	-1.75	15.07	22.70	7.63
Ghana						
1960-74	35.46	40.05	4.59	26.93	27.25	0.32
Zaïre						
1960-74	20.03	20.98	0.95	25.25	24.09	-1.16
Zambie/Zambia						
1966-74	21.06	[illegible]	-0.22	42.74	31.32	-11.42
Kenya						
1964-74	21.00	20.96	-0.04	33.77	33.63	-0.14
Moyenne-Mean[1]	20.96	23.00	2.04	24.43	24.09	-0.34

[1] Pondérée par le nombre d'observations/Weighted by number of observations

ANN

PRIX A LA CON
CONSUMER

Tableau / 1 : Prix pondéré à la consommation par grandes régions du monde/
Table Weighted consumer prices prices by world regions

In

	1960	1961	1962	1963	1964	1965	1966
nde/World	63.6	65.5	67.9	70.8	74.0	77.7	81.6
ys industrialisés/ ndustrial countries	71.8	73.2	75.2	77.3	79.2	81.6	84.4
utres Europe/ ther Europe	54.1	55.7	58.9	62.4	66.9	75.0	81.4
ustralie, Nouvelle Zelande, frique du Sud/ ustralia, New Zeland, outh Africa	76.6	78.4	78.8	79.5	81.5	84.8	87.4
ys en voie de développement/ eveloping countries	33.0	36.0	39.2	44.1	51.7	59.2	67.1
ys exportateurs de pétrole/ l exporting countries	57 3	58.2	59.0	59.4	60.7	62.0	63.8
tres, Hemisphères Occiden- al/Other, Western Hemisphere	14.3	17.1	20.6	25.6	36.1	46.5	57.2
utres, Moyen Orient ther Middle East	67.3	69.4	70.3	72.5	75.7	82.8	89.2
utres, Asie ther Asia	53.3	54.7	55.9	58.3	64.1	69.0	76.8
utres, Afrique ther Africa	65.2	68.6	69.2	71.5	76.3	80.5	84.0

Source : International Financial Statistics : Annual Data 1951 - 1975 Mai 1976 et

XE/ANNEX III

MMATION (1970 = 100)/
RICES (1970 = 100)

ce 1970 = 100

67	1968	1969	1970	1971	1972	1973	1974	1975
.5	89.6	94.2	100.0	105.9	112.1	122.7	140.9	160.0
.0	90.3	94.7	100.0	105.1	109.8	118.1	132.9	147.2
.9	90.0	94.3	100.0	109.7	120.1	136.1	161.5	190.4
.5	92.9	95.9	100.0	106.4	113.0	123.5	140.3	160.7
.1	85.2	91.5	100.0	109.6	123.1	153.0	200.3	262.8
.4	88.5	94.6	100.0	105.7	110.7	122.4	140.9	164.3
.0	78.1	87.7	100.0	116.3	142.4	186.7	256.6	397.8
.7	93.2	95.9	100.0	106.1	112.4	125.1	150.8	181.0
.1	90.4	93.2	100.0	105.6	113.2	128.2	163.0	186.5
.3	91.6	95.7	100.0	104.0	109.6	120.0	142.7	167.4

vril 1977

Tableau/Table 2 : Prix à la consommation totale des pays africains 1/ (1960 - 1975)
Consumer prices in African countries 1/ (1960 - 1975)

Pays/Countries	1960	1961	1962	1963	1964	1965	1966
Maroc/Morocco	79.9	81.3	85.4	90.4	94.1	97.3	96.3
Algérie/Algéria	82.1	84.7	88.0	(88.0)	/88.9	90.7	91.7
Tunisie/Tunisia	71.8	74.9	/76.0	78.0	81.3	86.7	90.0
Libye/Libya	(60.0)	(59.9)	(62.8)	(67.3)	/71.6	75.7	81.9
Egypte/Egypt	69.9	70.4	68.3	68.8	71.3	82.0	83.3
Soudan/Sudan	71.7	77.9	79.2	82.9	80.6	84.1	85.5
Mauritanie/Mauritania	(65.5)	/67.0	68.5	75.6	81.6	81.0	84.6
Sénégal	77.7	80.6	84.0	86.4	89.6	91.3	94.0
Mali	(71.5)	(74.4)	(79.4)	(79.4)	/79.5	79.0	86.7
Côte d'Ivoire/Ivory Coast	69.1	76.6	75.5	75.5	75.6	78.6	81.5
Haute Volta/Upper Volta	71.3	84.6	86.0	90.8	92.4	91.8	93.9
Bénin	(72.5)	(73.8)	(75.1)	(77.9)	(80.0)	(82.6)	(85.2)
Niger	70.4	75.9	73.0	/78.4	79.4	82.9	91.7
Cap Vert/Cape Verde	75.3	76.8	82.4	90.9	91.6	93.0	90.1
Gambie/Gambia	(85.9)	/89.2	90.8	94.9	90.6	91.8	91.9
Guinee/Guinea	(67.0)	(73.1)	(72.2)	(72.5)	(76.5)	(79.8)	(83.2)
Guinee Bissau/Guinea Bissau	(86.1)	(85.2)	(88.5)	(87.7)	(87.7)	(89.3)	(96.7)
Sierra Leone	66.8	69.6	69.0	69.6	77.5	81.6	84.6
Libéria	(76.8)	(79.0)	(77.7)	(76.7)	(79.3)	/80.7	83.2
Ghana	48.3	51.6	56.2	58.7	66.0	84.5	89.1
Togo	(84.7)	(86.2)	(87.7)	89.3*	/90.4*	91.5*	92.4
Nigéria	65.0	68.7	71.7	71.3	73.1	76.1	82.5
Cameroun/Cameroon	68.7	70.5	72.7	80.4	85.0	86.8	88.8
Tchad	62.1	65.2	66.6	70.3	/76.0	80.2	85.0
Empire centrafricain/ Central African Empire	59.6	64.0	68.1	71.2	78.3	85.7	88.2
Gabon	46.8	73.3	/75.8	81.6	84.1	86.2	89.3
Congo	66.8	71.4	74.6	90.6	/84.2	87.7	92.4
Guinée équatoriale/Equatorial Guinea	(63.5)	(65.8)	(70.8)	(73.5)	(78.4)	(83.0)	(85.4)
Sao Tome & Principe	(78.6)	(80.6)	(78.9)	(80.2)	(81.2)	(83.9)	(83.4)

Indice 1970 = 100

1967	1968	1969	1970	1971	1972	1973	1974	1975
95.5	96.0	98.8	100.0	104.2	108.1	112.5	/131.3*	141.6*
92.0	(93.0)	/93.8	100.0	102.6	106.4	112.9	/120.2*	133.3*
92.7	95.0	98.5	100.0	106.0	108.0	113.1	117.7	128.9
84.3	88.5	/96.1	100.0	97.3	97.0	104.5	112.5	122.9
90.0	/93.2	96.3	100.0	103.1	105.3	109.8	121.7	133.5
94.9	85.4	96.2	100.0	101.3	113.3	132.6	167.2	207.3
87.9	91.0	93.8	/100.0	107.6	116.4	124.8	140.4	/159.6*
93.7	94.1	97.8	//100.0	103.8	110.0	123.4	144.1	188.1
95.7	96.8	97.8	100.0	118.2	126.2	154.7	166.0	183.0
83.7	88.2	92.1	100.0	99.2	99.5	110.2	129.8	144.6
90.3	89.8	96.8	100.0	102.2	99.1	106.6	116.0	137.7
(87.9)	(91.4)	(94.1)	100.0	(103.7)	(106.8)	(108.2)	(121.7)	(144.0)
[illegible]	89.7	98.9	100.0	104.3	114.4	127.8	132.2	144.2
83.7	93.0	97.2	100.0	118.3	130.3	148.6	225.4	256.1*
93.2	97.1	102.0	/100.0	103.1	112.0	119.8	130.9	164.9
(86.5)	(89.5)	(92.8)	100.0	(98.3)	(101.6)	(109.9)	(127.6)	(147.5)
(93.4)	(94.3)	(95.1)	100.0	(103.8)	(105.9)	(114.9)	(132.2)	(150.7)
/89.4	90.9	93.6	100.0	98.4	103.8	109.7	125.5	150.5
87.8	90.1	99.3	100.0	100.2	104.2	124.6	148.9	169.1
83.6	91.4	96.4	100.0	104.9	114.8	127.9	163.3	230.5
90.3	90.5	96.0	100.0	108.9	113.6	119.3	134.2	158.8
79.5	80.3	88.3	100.0	113.5	116.8	121.0	141.4	186.2
91.7	/93.6	94.6	100.0	104.2	112.5	124.3	145.7	165.4
87.8	88.7	92.0	100.0	106.0	109.1	115.0	127.9	147.9
89.8	94.1	95.6	100.0	106.8	114.5	120.9	132.4	153.7
91.5	93.4	95.8	100.0	103.4	108.4	113.7	127.4	/163.6
95.7	99.3	98.6	100.0	104.1	114.2	118.2	124.8	146.3
(87.3)	(89.8)	(93.6)	100.0	(103.8)	(110.4)	(119.0)	(136.5)	(164.5)
(87.0)	(89.1)	(90.7)	100.0	(103.3)	(105.4)	(118.2)	(138.0)	(180.1)

Tableau / 2 : Prix à la consommation totale des pays africains 1/ (1960 - 1975) (suite)
Table Consumer prices in African countries 1/ (1960 - 1975) (cont'd)

Pays/Countries	1960	1961	1962	1963	1964	1965	1966
Zaïre	7.6	10.6	17.5	/25.3	35.1	35.1	40.6
Rwanda	(44.5)	(47.5)	(59.6)	(65.0)	(87.5)	(92.7)	/96.8
Burundi	(42.0)	(45.0)	(56.5)	/62.5	73.8	/87.9	91.9
Angola	66.0*	67.4*	71.1*	72.5*	73.8*	74.6	76.9
Afrique du Sud/South Africa	76.4	77.6	78.8	79.7	81.7	84.7	87.8
Namibie/Namibia	(76.4)	(77.6)	(78.8)	(79.7)	(81.7)	(84.7)	(87.8)
Botswana	(74.5)	(75.7)	(76.9)	(77.8)	(79.7)	(82.6)	(85.7)
Lesotho	(76.4)	(77.6)	(78.8)	(79.7)	(81.7)	(84.7)	(87.8)
Souaziland/Swaziland	(78.7)	(80.0)	(81.2)	(82.1)	(84.2)	/87.3	90.0
Zambie/Zambia	65.7*	65.9*	/66.7	66.4	68.5	74.0	81.6
Rhodesie du Sud/Southern Rhodesia	81.3	82.9	84.0	84.8	88.0	91.2	94.6
Malawi	68.4	70.2	72.0	73.8	/75.0*	75.2*	79.3*
Mozambique	74.3	/77.6	79.9	80.6	82.1	83.6	86.6
Madagascar	76.7	77.7	79.2	81.4	/85.4	89.3	92.0
Comorea/Comoros	(76.7)	(77.7)	(79.2)	(81.4)	(85.4)	(89.3)	(92.0)
Réunion	(75.7)	(76.7)	(78.2)	(80.3)	(84.3)	(88.5)	/90.8
Maurice/Mauritius	82.9	82.2	/83.6	83.1	84.6	86.2	88.4
Seychelles	(79.8)	(79.9)	(81.4)	(82.2)	(85.0)	(87.7)	(90.2)
Tanzanie/Tanzania	81.4	82.1	82.1	79.8	81.0	86.3	90.7
Ouganda/Uganda	63.3	73.4	63.3	64.7	70.8	82.2	81.5
Kenya	83.2	85.2	87.5	88.6	88.7	91.9	95.9
Somalie/Somalia	65.3	71.5	71.2	73.2	82.7	93.5	90.5
Djibouti	(67.6)	(67.3)	(67.3)	(69.9)	(75.7)	(82.0)	(88.7)
Ethiopie/Ethiopia	(66.6)	(66.6)	(68.6)	/69.9	71.3*	90.2*	88.7

Signes conventionnelles / Conventional Signes :
// Série remplaçant la précédente/ Series replacing former series
/ Série enchaînée à la précédente/ Séries linked to former series

1/ Dans les capitales sauf pour les pays mentionnés dans le tableau 3 de l'Annexe III/ In capi
Voir également notes du tableau 3 Annexe III/ See also notes of table 3 Annex III

Sources : CEA à partir de Annuaires des Statistiques du Travail 1970, 1975 Bulletins mensuels
International Financial Statistics Annual Data 1951-1975, May 1976 World Bank, Worl

Indice 1970 - 100

1967	1968	1969	1970	1971	1972	1973	1974	1975
85.6	85.4	/88.9	100.0	105.8	122.2	141.7	181.8	232.0
97.4	98.9	99.5	100.0	100.5	103.6	113.3	148.5	193.1
91.8	96.3	100.3	100.0	103.9	107.9	114.3	132.2	153.1
78.4	86.6	93.3	100.0	105.2	113.4	128.3	152.9	190.2*
90.7	92.3	95.1	/100.0	106.1	113.0	123.7	138.1	156.7
(90.7)	(92.3)	(95.1)	100.0	(106.1)	(113.0)	(123.7)	(138.1)	(156.7)
88.5*	91.9*	/94.6	100.0	106.1*	113.0*	119.7	135.7	153.4
(90.7)	(92.3)	(95.0)	/100.0	102.0*	104.4*	111.1	127.8	146.7*
91.8	95.1	97.8	100.0	102.0	104.4	116.5	139.0	155.8
85.8	95.0	/97.5	100.0	106.0	111.7	118.8	128.8	141.7
95.4	97.6	98.0	100.0	103.0	106.0	109.3	116.5	128.1
82.2*	/90.5	91.3	100.0	108.2	112.1	117.8	135.9	157.0
89.6	93.3	95.5	100.0	115.7	123.9	130.6	159.0	164.2
92.8	93.6	97.2	100.0	105.4	111.4	118.2	144.2	156.1
(92.8)	(93.6)	(97.2)	100.0	(105.4)	(111.4)	117.5*	154.3*	175.6
92.3	92.9	95.2	100.0	106.4	/114.6	128.0	146.5	165.1
90.0	96.3	98.5	100.0	100.3	105.7	120.0	154.9	177.7
(91.4)	(94.9)	(97.8)	/100.0	114.9	139.1	164.4	204.5	242.6
92.9	96.1	//96.6	100.0	104.7	112.8	124.5	148.9	187.7
84.2	81.5	91.1	100.0	115.8	112.3	139.7	232.6	280.8
97.6	98.0	97.8	100.0	103.8	/109.8	120.0	141.3	168.5
/90.0	93.2	99.3	100.0	99.4	96.5	102.7	121.5	145.0
(89.4)	(89.5)	(90.5)	100.0	(105.0)	(110.2)	(115.7)	(131.2)	(148.3)
89.4	89.5	90.8	100.0	100.5	94.4	102.8	111.7	119.0

* Indice estimé/Estimated index
( ) Indice non existant emprunté à d'autres pays/Non existant index borrowed from other countries

l cities except for those countries mentionned in table 3 of Annex III

Statistiques des Nations Unies, février 1969, avril 1974, février 1977/
ables 1976 Sources nationales

Tableau/Table 3 : Prix à la consommation par catégories de produits pour quelques pays africain
Consumer prices by groups of items for selected African countries (1960-1975)

A = Indices généraux
General Indices

B = Indices de l'alimentation
Food Indices

C = Indices du combu
Fuel and light I

Pays/Countries		Pondération/Weight	Année de Pondération/Year of weight	1960	1961	1962	1963	196
MAROC/MOROCCO[1/]	A	100.0	1970-71	79.9	81.3	85.4	90.4	94.1
	B	54.0		79.4	81.0	85.3	90.9	96.
	D	5.4		74.2	75.7	82.6	89.0	91.
	C et D	18.8		86.2	87.5	88.8	93.7	92.
ALGERIE/ALGERIA[2/]	A	100.0	1973	...	...	...	–	...
	B	. 50.3		...	...	...	–	...
	C			...	...	...	–	...
	D	14.2		...	....	...	–	...
	E	13.7		...	...	...	–	...
TUNISIE/TUNISIA	A	100.0	1965-68	71.8	74.9	//76.0	78.0	81.
	B	51.0		69.8	73.0	//74.3	75.6	79.
	C	...		78.1	79.8	//79.8	80.5	85.
	D	12.0		–	–	//76.6	86.8	87.
	E	18.0[a)]		–	–	//91.2	91.2	92.
LIBYE/LIBYA (Tripoli)	A	100.0	1969	–	–	–	–	74.
	B	37.2		–	–	–	–	69.
	C	...		–	–	–	–	–
	D	6.9		–	–	–	–	91.
	E	32.0[a)]		–	–	–	–	7
EGYPTE/EGYPT[4/]	A	100.0[b)]	1964-65	77.7	78.2	76.0	76.5	79.
	B	50.6		66.6	69.1	67.4	69.0	73.
	C	3.4		–	–	–	–	–
	D	7.7		–	–	–	–	–
	E	11.2		...	...	...	...	..
SOUDAN/SUDAN	A	100.0	1967-68	74.5	81.0	82.3	86.2	89.
	B	66.5		73.2	81.3	82.5	87.7	93.
	C	...		82.0	85.0	90.2	97.4	97.
	D	5.9		85.7	86.0	84.7	84.2	84.
	E	12.4[a)]		58.2	67.7	67.7	67.7	67.
MAURITANIE/MAURITANIA (Nouakchott) Européens/Europeans	A	100.0	1961[c)]	–	67.0	68.5	75.6	81.
	B	(51.0)		–	71.4	71.3	81.3	87.
	C	(12.3)		–	90.5	88.8	84.6	85.
	D	(5.2)		–	85.5	86.8	91.1	90.

(1960-1975)

Indice 1970 = 100

…tible et éclairage
…ices

C = Indices de l'habillement
Clothing Indices

E = Indices du loyer
Rent Indices

1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
97.3	96.3	95.5	96.0	98.8	100.0	104.2	108.1	112.5	/132.4*	14[illegible]*
99.5	96.6	95.6	95.8	98.9	100.0	106.3	111.7	117.7	/142.5*	153.2*
94.4	99.0	98.7	98.2	99.2	100.0	101.6	102.0	105.5	/121.8*	132.[illegible]*
94.8	95.5	94.5	96.9	98.8	100.0	101.1	105.8	108.3	/116.4*	125.[illegible]*
...	...	...	–	//93.8	100.0	102.6	106.4	112.9	/120.2*	133.[illegible]*
...	...	...	–	//94.7	100.0	102.7	106.7	118.7	/130.6*	14[illegible]* x
...	...	...	–	//100.0	100.0	100.0	100.0	100.0	100.4	101.[illegible] x
...	...	...	–	//82.1	100.0	102.9	106.5	107.1	/110.1*	125.4
...	...	...	–	//100.0	100.0	100.0	100.0	102.1	/102.4*	108.1*
86.7	90.0	92.7	95.0	98.9	100.0	106.0	108.0	113.1	117.7	[illegible]
85.7	88.6	91.4	93.6	98.6	/100.0	110.3	113.0	120.5	121.5	[illegible]
89.9	90.5	87.5	89.5	86.9	/100.0	/101.9	103.9	105.1	106.7	11[illegible]
92.3	96.6	97.6	98.5	98.8	/100.0	101.1	102.7	105.3	115.2	12[illegible]
93.3	98.7	98.7	101.4	104.7	/100.0	100.0	100.0	104.6	107.4	111.[illegible]
78.8	85.2	88.3	92.1	100.0	//100.0	97.3	97.0	104.5	112.5	12[illegible]
72.6	82.8	84.4	89.3	100.0	//100.0	88.9	80.9	74.1	79.3	8[illegible]
–	–	–	–	–	//100.0	97.0	75.9	79.8	83.2	8[illegible]
100.5	102.7	104.0	100.5	100.0	//100.0	95.6	92.9	92.1	95.4	10[illegible]
76.[illegible] 3/	80.[illegible] 3/	85.9 3/	93.7 3/	100.0 3/	//100.0	108.0	124.8	172.4	182.1	220.[illegible]
91.1	99.3	100.0	//33.2	96.3	100.0	103.1	105.3	109.8	121.7	13[illegible]
91.4	101.1	100.0	//88.7	93.6	100.0	105.4	108.3	115.6	135.2	15[illegible]
–	–	–	//100.5	100.3	100.0	98.2	93.3	88.6	90.5	[illegible]
–	–	–	//99.0	99.8	100.0	99.9	104.1	110.8	121.4	133.[illegible]
...	...	...	//98.5	99.7	100.0	100.0	100.0	100.0	100.0	100.[illegible]
87.4	88.9	98.7	88.8	100.0	//100.0	101.3	113.3	132.6	167.2	207.[illegible]
89.8	92.2	106.5	89.5	100.0	//100.0	99.2	109.5	127.4	159.9	204.[illegible]
97.4	97.4	97.4	98.0	100.0	–	–	–	–	–	–
84.2	84.2	91.5	93.6	100.0	//100.0	100.0	100.0	129.9	183.4	...
67.7	67.7	67.7	70.2	100.0	//100.0 3/	115.5 3/	130.9 3/	153.7 3/	199.1 3/	...
81.0	84.6	87.9	91.0	93.8	100.0	107.6	116.4	124.8	//100.0	107.[illegible]
85.0	91.0	94.3	94.2	93.9	100.0	109.6	119.2	132.4	//100.0	105.[illegible]
83.9	80.9	82.7	94.2	100.8	100.0	109.6	119.8	123.8	137.3	//103.[illegible]
84.0	87.4	92.0	102.7	100.8	100.0	103.7	118.2	124.7	137.3	//109.[illegible]

Tableau / Table 3 : Prix à la consommation par catégorie de produits pour quelques pays africains (
Consumer prices by groups of itmes for selected African countries (1960-1975) (c

A = Indices généraux / General Indices B - Indices de l'Alimentation / Food Indices C = Indices du co / Fuel and ligh

Pays/Countries		Pondération/ Weight	Année de pondération/Year of weight	1960	1961	1962	1963	1964
SENEGAL (Dakar) 5/	A	100.0	1960-61	77.7	80.6	84.0	86.4	89.6
	B	56.0		72.5	76.2	81.0	84.7	89.9
	C	5.8		85.9	89.8	91.8	92.4	92.9
	D	11.9 a)		131.3	123.6	112.1	110.6	105.7
	E	8.7		-	-	-	-	-
MALI (Bamako)	B							
COTE D'IVOIRE/ IVORY COAST (Abidjan) Africains/Africans	A	100.0	1956	69.1	76.6	75.5	75.5	75.6
	B	51.1 c)		65.3	77.1	72.8	72.6	72.9
	C	8.1		70.2	74.7	79.6	77.3	79.3
	D	8.4		71.5	76.6	78.1	79.7	85.2
	E	11.6		84.6	86.9	91.8	91.8	92.2
HAUTE VOLTA (Ouagadougou) UPPER VOLTA	A	100.0	1958	71.1	84.6	85.9	92.1	92.6
	B	41.6		77.1	87.0	89.3	87.5	85.4
	C	4.1		...	...	...	...	...
	D	10.9		49.6	75.3	84.4	95.9	96.9
	E	17.1		...	...	...	...	...
NIGER (Niamey)	A	100.0	1964	70.4	75.9	73.9	/78.4	79.4
	B e)	46.1		67.4	74.5	72.5	/77.3	77.7
	C	11.1 f)		84.1	88.7	84.9	86.4	95.2
	D	6.0		73.8	81.7	79.2	/82.9	83.1
CAP VERT/CAP VERDE	A	-	-	75.3	76.8	82.4	90.9	91.6
	B	-	-	71.9	72.5	79.0	86.6	87.2
	C	-	-	...	...	...	...	...
GAMBIE/GAMBIA	A	-	-	-	...	...	...	...
	B	-	-	-	...	...	...	...
SIERRA LEONE (Freetown)	A	100.0	1967	66.8	69.6	69.0	69.6	77.5
	B	58.7		...	77.3	73.9	69.4	76.1
	C	7.0		...	79.6	77.5	78.2	72.6
	D	7.9		...	83.7	81.3	80.1	79.4
	E	12.4		...	38.1	43.0	55.7	76.1
LIBERIA (Monrovia)	A	100.0	1963	-	-	-	-	79.3 7/
	B	40.1		-	-	-	-	82.6 7/
	C	5.0		-	-	-	-	100.0 7/
	D	13.8		-	-	-	-	71.1 7/
	E	14.9		-	-	-	-	86.3 7/

0-1975) (suite)
nt'd)

Indice 1970 = 100

ustible et éclairage
Indices

D = Indices de l'habillement
Clothing Indices

E = Indices du loyer
Rent Indices

1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	19
91.3	94.2	93.7	94.1	97.8	//100.0	103.8	110.0	123.4	144.1	18
92.0	95.4	95.2	94.0	97.1	//100.0	106.1	113.0	135.7	153.9	215.
95.9	96.3	96.7	97.0	98.0	//100.0	100.2	103.1	105.7	141.9	
105.7	105.7	99.2	98.5	99.3	//100.0	102.2	106.2	111.3	120.6	14
-	-	-	-	-	100.0	102.2	111.2	112.6	119.0	135.5
	92.5	99.0	98.8	98.7	100.0	121.1	130.0	154.2	171.5	
76.6	81.9	83.7	88.2	92.1	100.0	99.2	99.5	110.2	129.8	144.
75.1	76.3	77.7	82.7	88.7	100.0	98.2	97.1	114.3	135.0	149
82.7	77.2	81.1	82.5	85.9	100.0	104.4	109.2	116.2	139.1	156.
[illegible]	93.7	91.5	93.8	94.7	100.0	96.6	96.7	97.6	114.2	131.
95.8	96.6	103.3	106.8	106.9	100.0	95.8	95.9	96.2	103.0	114.
91.6	94.0	90.3	89.8	96.8	100.0	102.2	99.1	106.6	115.0	137.7
83.4	89.8	78.4	78.1	94.5	100.0	104.5	104.1	125.8	146.1	208.7
97.7	97.7	97.7	97.7	98.3	100.0	100.0	...	...	...	...
96.1	92.7	93.0	95.2	96.5	100.0	100.0	88.3	81.0	82.4	62.1
100.0	100.0	100.0	100.0	100.0	100.0	100.0	...	...	...	...
[illegible]	91.7	92.1	89.7	98.9	100.0	104.3	114.4	127.8	132.2	144.2
80.6	93.9	91.9	88.1	102.4	100.0	105.5	122.7	143.8	147.8	139.
96.0	100.0	100.0	99.4	100.0	100.0	100.0	97.8	97.1	103.9	115.
84.8	87.5	92.2	90.5	92.1	100.0	99.3	89.5	88.5	90.9	103.
93.0	90.1	93.7	93.0	97.2	100.0	118.3	130.3	148.6	225.4	
88.5	85.9	89.7	88.5	94.9	100.0	125.6	141.0	160.9	245.2	
...	100.9	105.3	104.4	101.8	100.0	99.1	100.0	115.8	...	
...	...	...	...	...	100.0	103.1	112.0	119.8	130.9	1
...	...	...	...	...	100.0	103.1	113.2	120.0	135.9	1
81.1	84.6	/89.4	90.9	93.6	100.0	98.4	103.8	109.7	125.5	150.
79.0	80.9	/85.0	84.5	88.7	100.0	96.2	104.6	114.0	135.2	1
75.2	92.4	/96.1	90.5	98.5	100.0	104.3	103.7	104.7	116.9	128.
75.7	82.1	/87.6	94.4	98.5	100.0	100.6	100.6	100.6	105.3	113.
81.7	87.2	/93.4	96.5	99.0	100.0	100.3	100.4	101.1	101.7	121.
80.7	83.2	87.8	90.1	99.3	100.0	100.2	104.2	124.6	148.9	169.
84.6	88.8	90.1	88.3	98.8	100.0	90.8	90.8	118.2	149.4	172.
93.4	97.9	...	...	102.7	100.0	104.3	103.1	115.7	151.5	16
79.5	71.4	...	...	100.7	100.0	96.4	104.4	117.5	143.1	172.
86.4	89.4	...	...	98.8	100.0	100.9	110.3	140.3	140.8	15

Tableau/ 3 : Prix à la consommation par catégorie de produits pour quelques pays africains
Table / 3 : Consumer prices by groups of items for selected African countries (1960-1975

A = Indices généraux / General Indices
B = Indices de l'Alimentation / Food Indices
C = Indices d / Fuel and

Pays/Countries		Pondération/ Weight	Année de Pondération/Year of weight	1960	1961	1962	1963	1964
GHANA (Accra)	A	100.0	1961	48.3	51.6	55.2	/58.7	66.0
	B	54.7		46.3	49.2	53.8	/56.2	65.4
	C	4.3		63.0	66.2	60.1	/65.4	76.0
	E	12.0		89.1	91.0	91.0	/91.0	91.0
TOGO (Lomé)	A	100.0	1965	-	-	-	...	...
	B	58.5		-	-	-	...	...
	C	5.3		-	-	-	...	...
	D	7.7		-	-	-	...	...
	E	6.8 d)		-	-	-	...	...
NIGERIA (Lagos) 8/	A	100.0	1960	65.0	68.7	71.7	71.3	73.1
	B	53.9		59.4	64.2	68.0	63.1	63.5
	C	3.1		69.0	72.0	71.1	71.5	72.5
	D	9.9		64.5	68.8	69.9	75.5	78.6
	E	12.8 d)		68.1	71.3	74.5	77.5	80.8
CAMEROUN/CAMEROON Africains/Africans	A	100.0	1964-65	...	70.5 7/6/	72.7 5/	80.4 5/	85.0
	B	43.9		...	68.1 7/6/	70.7 5/	75.3 5/	84.2
	C	...		...	101.0 7/6/	101.6 5/	107.3 5/	111.9
	D	16.3		...	82.4	81.3	92.4	103.3
	E	7.5 g)		...				
TCHAD/CHAD (Ndjamena)	A	100.0	1964	62.1	65.2	66.6	70.3	/75.0
	B	45.9 h)		59.0	61.8	63.4	67.4	/72.0
	C	5.8		98.5	100.4	96.7	96.2	/97.7
	D	3.5		78.5	83.6	86.0	87.3	/91.4
EMPIRE CENTRAFRICAIN CENTRAL AFRICAN EMPIRE Européens/Europians	A	100.0	1955-56	59.5	64.0	68.1	71.2	73.3
	B	58.0		60.3	64.1	69.0	73.3	81.0
	C	8.0		76.7	80.4	82.7	81.3	83.5
	D	8.0		42.6	49.5	53.1	57.1	63.0
GABON (Libreville) Africains/Africans	A	100.0 c)	1969	46.8 6/	73.3 6/	/75.8	81.6	84.1
	B	51.1		76.0 6/	77.1 6/	/79.8	85.3	85.4
	C	5.6		81.9 6/	86.3 6/	/87.6	92.4	95.8
	D	3.4		74.9 6/	72.2 6/	/71.4	76.1	88.3
CONGO (Brazzaville) Européens-Europeans	A	100.0	1963	66.8	71.4	74.6	80.6 7/	/84.2
	B	51.0		67.8	71.9	73.5	80.9 7/	/85.8
	C	5.4		70.1	78.5	82.6	84.8 7/	/86.8
	D	8.2		61.0	64.0	64.5	70.1 7/	/69.9

(1960-1975 (suite)
(cont'd)

combustible et de l'éclairage — ight Indices | E = Indices de l'habillement — Clothing Indices | F = Indices du loyer — Rent Indices

1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
84.5	85.1	83.6	91.4	96.4	100.0	104.9	114.0	127.9	163.3	[illegible]
89.1	92.1	78.0	88.2	95.3	100.0	106.2	118.9	141.9	184.7	252.4
88.0	96.7	90.1	96.5	99.4	100.0	98.0	111.3	127.6	170.9	...
98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	...
...	92.4	90.3	90.5	95.0	100.0	108.9	113.6	119.3	134.2	150.8
...	90.1	85.0	84.3	96.2	100.0	110.4	119.0	121.4	135.6	159.
...	93.5	89.8	97.2	98.4	100.0	111.1	112.8	118.5	...	
...	88.1	90.2	91.5	92.3	100.0	108.8	113.3	114.6	134.5	
...	93.9	97.9	92.7	93.3	100.0	106.0	116.1	117.8	131.8	
75.1	82.5	79.5	80.3	88.3	100.0	113.5	116.8	121.0	141.4	[illegible]
55.5	77.2	69.8	66.8	90.8	100.0	125.2	120.1	125.1	150.0	[illegible]
81.3	83.0	84.1	85.6	87.9	100.0	96.5	99.4	87.1	88.1	[illegible]
80.8	82.6	83.7	87.7	92.2	100.0	107.0	110.5	135.1	167.1	[illegible]
93.9	85.9	90.0	93.2	95.7	100.0	103.0	105.0	108.0	110.0	...
/85.6 6/	/86.8 6/	91.7 6/	/93.6	94.6	100.0	104.2	112.5	124.3	145.7	[illegible]
88.1 6/	/89.9 6/	91.3 6/	/91.4	91.5	100.0	106.3	119.1	129.9	148.2	172.[illegible]
109.6 6/	/102.2	107.8	107.7	107.0	100.0					
104.6	89.3	92.5	96.5	97.7	100.0	100.4	110.4	122.4	134.8	146.[illegible]
			100.0 3/	100.0 3/	100.0 3/	103.1 3/	114.2 3/	121.7 3/	137.9 3/	166.[illegible] 3/
80.2	95.0	87.8	88.7	92.0	100.0	106.0	109.1	115.0	/127.9	147.[illegible]
77.9	83.3	85.7	85.9	90.0	100.0	106.0	108.6	117.1	/128.6	148.[illegible]
98.6	98.6	98.9	100.0	99.6	100.0	99.2	100.3	108.0	/135.2	172.5
94.1	103.3	102.9	95.1	95.3	100.0	110.4	111.5	126.6	/155.2	183.[illegible]
85.7	88.2	89.8	94.1	95.6	100.0	106.8	114.5	120.9	132.4	153.7
91.4	92.8	92.3	96.0	98.5	100.0	108.1	118.4	125.3	137.4	150.[illegible]
85.1	87.4	91.8	94.2	96.2	100.0	107.7	113.4	113.4	...	...
70.8	73.1	74.2	83.3	91.7	100.0	101.8	107.0	116.6	...	...
86.2	89.3	91.5	93.4	95.8	100.0 7/	/103.4	108.4	113.7	127.4	/163.[illegible]
87.9	89.6	92.3	94.8	97.7	100.0 7/	/106.4	112.9	120.5	129.6	...
93.2	93.8	95.9	96.8	97.2	100.0 7/	/102.7	109.5	111.0	114.3	...
92.8	88.8	96.6	92.1	92.7	100.0 7/	/ 97.5	100.1	99.0	123.4	...
87.7	92.4	95.7	99.3	98.6	100.0	104.1	114.2	118.2	124.8	146.[illegible]
89.1	95.2	98.4	101.4	99.3	100.0	104.9	115.7	121.4	128.4	[illegible]
87.1	87.4	91.8	94.2	96.2	100.0	107.8	109.4	109.4	108.8	[illegible]
74.3	73.1	74.1	83.3	91.7	100.0	101.8	145.4	141.3	137.0	[illegible]

Tableau/Table 3 : Prix à la consommation par catégorie de produits pour quelques pays africains
Consumer prices by groups of items for selected African countries (1960-1975)

A = Indices généraux
General Indices

B = Indices de l'Alimentation
Food Indices

C = Indices du c
Fuel and lig

Pays/Countries		Pondération/Weight	Année de pondération/Year of weight	1960	1961	1962	1963	1964
ZAIRE	A	100.0	1969	7.6 a)	10.0 2/	17.5 2/	/26.3	36.1
	B	70.8		7.7	9.8 2/	16.3 2/	/26.3	36.2
	C	...		...	...	...	...	...
	D	5.7		...	...	...	...	...
	E	6.9 a)		–	–	–	–	–
RWANDA (Kigali)	A							
	B							
	D							
BURUNDI (Bujumbura) Fonctionnaires africains/African civil servants	A	100.0	1965	–	–	–	62.5 6/	73.8 6/
	B	59.6		–	–	–	55.3 6/	69.7 6/
	C	11.4		–	–	–	70.6 6/	76.0 6/
	D	11.9 a)		–	–	–	–	–
AFRIQUE DU SUD/SOUTH AFRICA Européens/Europeans	A	100.0	1966	76.4	77.6	78.0	79.7	81.7
	B	28.8		80.2	81.8	81.3	82.2	84.0
	C	2.4		81.3	84.1	86.0	87.6	89.3
	D	9.8		95.1	95.1	94.7	93.9	94.3
	E	17.6 f)		67.9	69.0	71.6	72.2	74.3
BOTSWANA 8/ Africains/Africans	A	100.0	1968-70	–	–	–	–	–
	B	60.0		–	–	–	–	–
	C	14.0 k)		–	–	–	–	–
	D	15.0		–	–	–	–	–
	E	11.0 l)		–	–	–	–	–
LESOTHO 8/ Africains/Africans	A	100.0	1972-73					
	B	45.3						
	C	7.4						
	D	21.1						
	E	4.1 d)						
SWAZILAND 8/ (Mbabane-Manzini) Africains/Africans	A	100.0	–					
	B	74.0						
	C	6.0						
	D	10.0						
ZAMBIE/ZAMBIA 8/	A	100.0	1966-68	67.5	67.7	68.6	69.3	70.4
	B	64.7		71.7	71.9	72.7	71.7	73.3 6/
	C	13.6		72.6 6/	73.0 6/	/73.3 6/	74.2 /	75.1 6/
	D	11. a)		88.6 6/	88.6 6/	/94.1 6/	94.2 6/	93.6 6/

1969-1975) (suite)
Cont'd)

Indice 1970 = 100

bustible et de l'éclairage Indices				D = Indices de l'habillement Clothing Indices				E = Indices du loyer Rent Indices		
1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	19
35.1	40.6	55.6	85.4	//88.9	100.0	105.8	122.2	141.7	-181.8	23
37.2	45.1	63.3	88.3	//90.8	100.0	110.4	132.9	154.6	-199.6	250.
34.1	43.7	60.6	84.9	//92.3	100.0	94.6	97.5	114.4	170.8	...
34.1	37.9	40.4	78.0	//90.4	100.0	100.6	118.9	136.3	159.9	...
-	-	-	-	//77.6	100.0	90.11	90.5	100.2	/123.5	141.
					100	103	106	114	150	
					100	105	110	117	151	
					100	102	104	118	181	
/87.9	91.9	90.8	96.3	100.3	100.0	103.9	107.9	114.3	132.2	153.
/90.2	94.5	91.4	99.8	102.9	100.0	104.9	106.9	113.2	135.5	161.
/84.5	87.3	90.7	92.8	96.2	100.0	105.5	108.6	111.5	123.9	136.
/86.7	90.5	93.2	94.2	97.6	100.0	100.7	114.7	127.0	136.4	149.
84.7	87.8	90.7	92.3	95.1	/100.0	106.1	113.0	123.7	138.1	156.
86.5	89.6	92.8	94.3	95.8	/100.0	104.8	112.3	129.4	148.8	171.
91.1	93.6	94.6	97.2	98.8	/100.0	103.2	11.0	122.7	132.4	151.
95.5	96.3	96.7	97.5	98.5	/100.0	102.3	107.6	116.3	133.2	147.
76.5	80.5	83.7	86.1	89.9	/100.0	107.2	113.7	122.1	133.4	149.
-	-	-	-	94.6	100.0	...	...	119.7	135.7	153.
-	-	-	-	95.4	100.0	...	...	121.7	142.8	[illegible]
-	-	-	-	92.6	100.0	...	...	124.6	120.8	[illegible]
-	-	-	-	82.4	100.0	...	...	124.5 7/	142.9 9/	[illegible]
-	-	-	-	93.7 3/	100.0	...	...	...	104.3 9/	...
							93.5	100.0	114.6	131.
							91.6	100.0	114.5	135.
							96.5	100.0	144.6	169.
							86.6	100.0	140.5	171.
							93.5	100.0	105.8	[illegible]
87.3	90.0	91.8	95.1	97.8	100.0	102.0	104.4	116.5	139.0	155.
86.9	90.7	92.5	95.7	98.9	100.0	101.3	102.8	118.8	142.5	159.
94.4	96.0	97.6	97.0	98.1	100.0	108.3	112.8	117.7	171.8	212.
86.6	87.0	88.2	98.2	97.7	100.0	97.7	100.4	108.6	135.1	150.
75.1	93.9	88.1	97.6	//97.9	100.0	105.0	111.7	118.2	128.8	141.
77.4 5/	96.4 5/	90.8 5/	98.4 5/	//92.9	100.0	106.6	111.6	119.0	129.9	144.
77.8 5/	79.4 5/	82.2 5/	93.8 5/	//97.4	100.0	105.8	114.5	122.9	133.5	145.
93.3 6/	93.6 5/	93.6 5/	93.8 5/	//94.4	100.0	103.1	105.9	110.0	114.2	120.

Tableau 3 : Prix à la consommation par catégorie de produits pour quelques pays africains
Table 3 : Consumer prices by groups of items for selected African countries (1960-1975)

A = Indices généraux / General Indices   B = Indices de l'Alimentation / Food Indices   C = Indices / Fuel an

Pays/Countries		Pondération/ Weight	Année de pondération/Year of weight	1960	1961	1962	1963	1964
RHODESIE DU SUD/ SOUTHERN RHODÉSIA Africains/Africans	A	100.0	1963-64	81.3	82.9	84.0	84.8	88.9
	B	...		80.0	82.2	83.3	84.2	85.0
MALAWI (Blantyre)[8]	A	100.0	1968-69	...	...	...	...	...
	B	55.5		...	...	...	...	...
	C	...		...	...	...	...	...
	D	17.6		...	...	...	...	...
MOZAMBIQUE (Lourenço Marques)	A	100.0	1956-57	74.3	/77.6	79.9	80.6	82.1
	B	47.5		74.4	/77.2	78.0	78.0	78.0
	C	3.4		84.9	/92.7	91.9	93.7	94.7
	D	1.5		–	/83.0	83.0	87.9	91.1
	E	0.2		–	/60.6	61.2	66.0	69.7
MADAGASCAR (Tananarive) Malgaches/Madagascans		100.0	1968-69	79.7[6]	77.7[6]	/79.2[6]	81.4[6]	/85.4
	B	60.4		76.4[6]	78.3[6]	/79.2[6]	81.2[6]	/84.4
	C[9]	9.1		90.4[6]	89.1[6]	/86.7[6]	80.5[6]	/90.[illegible]
	D[9]	8.6		75.2[6]	76.6[6]	/80.6[6]	81.1[6]	/85.5
COMORES (Moroni)[11] COMOROS	A	100.0	...					
	B	67.8						
	D	11.6						
	E	6.1)						
REUNION (Sain Denis)	A	100.0	1969	–	–	–	–	–
	B	39.5		–	–	–	–	–
	D	10.1		–	–	–	–	–
	E	16.0)		–	–	–	–	–
MAURICE/ MAURITIUS	A	100.0	1962	83.4	82.8	//83.6[7]	83.1	84.6
	B	56.9		83.5	82.5	//84.6[7]	83.1	85.5
	C	3.5		90.2	90.2	//90.2[7]	90.2	92.4
	D	10.3		77.9	78.6	//78.7[7]	78.7	78.9
	E	2.8		100.0	100.0	//100.0[7]	100.0	100.0
SEYCHELLES (Victoria)	A	100.0	1974	–	–	–	–	–
	B	71.5		–	–	–	–	–
	C	3.9		–	–	–	–	–
	D	6.4		–	–	–	–	–
	E	8.7		–	–	–	–	–

1960-1975) (Suite)
cont'd)

Indice 1970 = 100

u combustible et de l'éclairage D = Indices de l'Habillement E = Indices du loyer
light Indices Clothing Indices Rent Indices

1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
91.3	94.0	95.4	97.6	98.0	100.0	103.0	106.0	109.3	116.5	12.
88.0	92.4	94.2	98.1	98.0	100.0	102.3	105.2	109.6	117.3	13.
...	...	...	/90.5	91.3	100.0	108.2	112.1	117.8	135.9	157.
...	...	...	/84.6	85.1	100.0	11.2	115.6	123.8	144.2	171.
...	...	...	/95.8	96.4	100.0	107.0	110.3	113.0	137.8	158.
...	...	...	/94.8	97.1	100.0	100.3	103.2	109.4	120.8	132.
83.6	86.6	89.6	93.3	95.5	100.0	115.7	123.9	130.6	159.0	164.
79.5	84.8	87.9	90.2	94.7	100.0	113.6	129.5	127.3	153.3	173.
93.7 –	92.6	96.8	97.9	98.9	100.0	108.4	114.7	115.8	144.2	149.
92.7	93.7	98.1	99.2	99.2	100.0	121.8	135.5	145.0	123.5	225.
72.7	72.7	83.0	88.5	90.9	100.0	114.5	124.2	132.7	135.2	113.
89.3	92.0	92.8	93.6	97.2	100.0	105.4	111.4	/118.2	144.2	155.
89.8	93.5	93.7	92.8	97.1	100.0	105.3	111.9	/122.3	159.1	169.
92.2	93.7	94.9	94.8	96.6	100.0	100.9	101.3	/103.6	115.0	129.
84.8	85.6	89.0	92.4	96.4	100.0	105.8	111.5	111.8	125.1	143.7
							100.0	105.4	138.4	157.5
							100.0	101.1	140.8	152.
							100.0	112.5	129.7	195.3
							100.0	109.8	166.7	212.
–	90.8	92.3	94.9	95.2	100.0	106.4	/114.6	122.0	146.5	165.1
–	88.0	90.7	92.0	94.0	100.0	103.1	/111.6	132.5	155.7	175.
–	105.7	99.2	98.6	99.3	100.0	107.9	/122.1	128.8	141.9	158.3
–	94.5	94.3	94.0	95.7	100.0	111.6	/117.9	128.3	145.9	152.
86.2	88.4	90.0	96.3	98.5	100.0	100.3	105.7	120.0	154.9	177.
86.3	88.4	89.1	98.1	98.6	100.0	100.1	106.3	123.0	152.9	16.
93.4	93.4	93.9	100.0	100.0	100.0	99.9	99.9	106.9	125.2	13.
81.3	83.9	85.4	91.7	99.9	100.0	100.8	103.3	120.6	151.7	173.
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
–	–	–	–	–	100.0	114.9	139.1	164.4	/204.5	242.
–	–	–	–	–	100.0	118.4	152.3	188.3	//100.0	122.
–	–	–	–	–	100.0	137.0	144.1	150.6	//100.0	117.
–	–	–	–	–	100.0	104.5	114.3	140.3	//100.0	114.5
–	–	–	–	–	100.0	109.3	130.0	138.4	//100.0	107.3

Tableau / 3 : Prix à la consommation par catégorie de produits pour quelques pays africains
Table / 3 : Consumer prices by groups of items for selected African countries (1960-1975)

A = Indices généraux
General Indices

B = Indices de l'Alimentation
Food Indices

C =

Pays/Countries		Pondération/Weight	Année de pondération/Year of weight	1960	1961	1962	1963	1964
TANZANIE/TANZANIA 12/	A	100.0	1969	81.4	82.1	82.1	79.8	81.0
	B	54.3		85.4	87.3	88.0	85.0	85.[illegible]
	C	6.6		60.4	58.0	55.5	55.4	64.9
	D	10.8		60.9	58.5	53.8	54.2	57.9
	E	8.6		-	-	-	-	-
OUGANDA/UGANDA Kampala Africains/Africans	A	100.0	1964	63.3	73.4	63.3	64.7	70.8
	B	81.0		59.3	72.7	59.3	61.3	68.7
	C	8.0		-	-	-	-	-
	D	9.0		55.9 6/	56.1 6/	/56.4 6/	57.1 6/	57.7 6/
KENAY (Nairobi) 9/	A	100.0	1969	83.2*	85.[illegible]*	87.5*	88.6*	88.7*
	B	45.6		82.5*	84.0*	87.1*	86.0*	84.[illegible]*
	C	5.0		69.1*	72.4*	75.4*	78.1*	84.9*
	D	5.1		89.3*	90.8*	90.2*	90.1*	88.8*
	E	22.4						
SOMALIE/SOMALIA Mogadishu)	A	100.0	1966	65.3	71.5	71.2	73.2	82.7
	B	61.0		68.8	73.6	73.3	74.8	83.9
	C	4.0		112.4	114.8	109.6	105.6	103.0
	D	4.0 j)		42.4	54.3	52.5	54.9	61.3
	E	15.0		53.6	64.1	65.9	71.3	91.3
REPUBLIQUE DE DJIBOUTI 13/ REP BLIC OF DJIBOUTI (Djibouti)	A	100.0						
	B	50.0						
	C	12.5						
	D	8.3						
ETHIOPIE/ETHIOPIA	A	100.0	1963	-	-	-	59.3	...
	B	49.0 h)		-	-	-	64.2	...
	C	14.6		-	-	-	75.9	...
	D	6.7		-	—	-	73.1	...

Signes conventionnels : // Serie remplaçant la précédente/Series linked to former series
Conventional signes: / Série enchainée à la précédente/Series linked to former series
* Indice estimé/Estimated index

Sources : CEA à partir de Annuaires des Statistiques du Travail 1970, 1
Annuaires Statistiques de l'Afrique et Guides techniques du I

1960-1975) (suite)
cont'd)

Indice 1970 = 100

ndices du combustible et de l'éclairage / uel and light Indices — D = Indices de l'Habillement / Clothing Indices — E = Indices du loyer / Rent Indices

1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	197
86.3	90.7	92.9	96.1	//96.6	100.0	104.7	112.0	124.5	140.9	167.
96.8	94.8	96.7	98.0	//97.8	100.0	105.8	115.4	128.5	173.8	227.
86.9	73.5	86.5	92.0	//96.7	100.0	103.8	104.5	117.6	115.5	155.
63.0	68.3	71.0	83.0	//96.2	100.0	104.7	116.3	132.5	147.5	175.7
-	-	-	-	//100.0	100.0	103.9	103.9	105.0	//100.0	102.
80.2	81.5	84.2	81.5	91.1	100.0	115.8	112.3	139.7	233.6	28
84.2	81.5	87.0	80.8	88.4	100.0	124.7	117.8	139.7	245.2	30
98.4	105.7	95.1	86.9	94.8	100.0	96.7	96.7	125.4	...	...
/59.4	60.6	60.0	72.8	93.3	100.0	100.0	105.6	161.1	...	...
91.9*	95.0*	97.0*	98.0*	97.8*	100.0	103.8*	//100.0	108.2	124.3	147.
90.7*	97.2*	96.5*	98.7*	97.6*	100.0	102.5*	//100.0	104.8	123.6	14
85.5*	85.6*	88.2*	91.8*	93.3*	100.0	103.6*	//100.0	105.7	117.7	13
91.5*	92.4*	91.7*	91.7*	91.7*	100.0	102.0	//100.0	115.5	149.5	171.
					100.0	100.5	//100.0	116.4	127.8	136.
93.5	90.5	/90.0	93.2	99.3	100.0	99.4	96.5	102.7	121.7	145.
99.0	89.8	/87.7	90.3	97.5	100.0	99.2	96.9	107.2	127.9	157.
103.3	101.8	/100.4	101.0	112.3	100.0	102.8	101.0	74.1	78.3	84.
71.2	76.9	/81.5	92.3	99.5	100.0	103.7	104.9	110.1	126.5	145.
94.1	104.0	/103.7	105.1	111.1	100.0	89.1	74.9	76.3	74.7	82.
				94.5	100.0	100.5	106.0	111.0	134.2	14
				89.0	100.0	101.7	108.0	114.1	137.8	1
				107.5	100.0	100.6	100.8	100.8	135.7	[illegible]
				100.0	100.0	98.8	112.7	117.4	120.9	[illegible]
...	88.7	89.4	89.5	90.9	100.0	100.5	94.4	102.8	111.7	1
...	87.1	85.6	85.0	86.6	100.0	99.9	87.9	99.2	107.7	11
...	92.1	90.8	100.8	98.3	100.0	101.3	107.2	108.3	119.1	13
...	85.3	89.0	89.7	93.9	100.0	103.3	107.1	119.8	128.1	13

5, 1976 Bulletin Mensuels de statistiques des Nations Unies, Février 1969 Avril 1974 Fev. 197
T Vol I 1973, 1976 et questionnaires de la CEA, Sources Nationales

Notes au tableau 3 de l'Annexe III

Notes to table 3 of Annex III

1/ Jusqu'en 1973 Casablanca seulement A partir de 1974 8 centres urbains (Source à partir de 1974 : World Bank current economic position and prospects of Morocco Vol. II Statistical Appendix March 1977.

2/ Jusqu'en 1973 Grand Alger. A partir de 1974 31 centres urbains (Source à partir de 1974 : World Bank : current economic position and propspects of Algeria Vol. II Statistical Appendix, January 1977.

3/ Y compris combustibles et éclairage

4/ Avant 1968 le Caire seulement

5/ Avant 1970 Européens

6/ Européens

7/ Inférieur à une année

8/ Familles à revenu modique

9/ Familles à revenu moyen à partir de 1972

10/ Avant 1974 Européens. Après 1974 Familles à revenu élevé

11/ Source : World Bank : The Economy of the Comoros Statistical Annex May 1977

12/ Avant 1969 Dar-es-Salaam seulement

13/ Juillet à Juillet

1/ Until 1973 Casablanca only. From 1974 8 urban centres (Sources from 1974 : World Bank : current economic position and prospects of Morocco Vol. II Statisticial Appendix March 1977.

2/ Until 1973 Grand Algiers From 1971 31 urban centres (Source from 1974 : World Bank : current economic position and prospects of Algeria Vol. II Statistical Appendix January 1977.

3/ Including Fuel and light

4/ Before 1968 Cairo only

5/ Before 1970 Europeans

6/ Europeans

7/ Less than one year

8/ Low income group

9/ Middle income group from 1972

10/ Before 1974 Europeans. After 1974 high income group

11/ Source : World Bank : The Economy of the Comoros Statistical Annex May 1977

12/ Before 1969 Dar-es-Salaam only

13/ July to July

Notes au tableau 3 de l'Annexe III (suite)

Notes to table 3 of Annex III (Cont'd)

a) Y compris C	a) Including C
b) Le Caire	b) Cairo
c) Révisé	c) Revised
d) Y compris réparations	d) Including repairs
e) Y compris savon	e) Including soap
f) Y compris linge de maison	f) Including household linens
g) Y compris C et services domestiques	g) Including C and domestic services
h) Non compris tabac	h) Tobacco not included
i) Y compris entretien	i) Including maintenance
j) Y compris eau	j) Including water
k) Y compris équipement ménager	k) Including household equipment
l) Y compris services et taxes	l) Including taxes and services
m) Non compris eau	m) Excluding water
n) Y compris articles ménagers	n) Including household items

PRIX DE GROS OU A LA
AVERAGE ..GES (NA

Tableau / Table 1 : Prix de gros par groupe de produits pour quelques pays africains (1960-1975)
Wholesale prices by commodity groups for selected African countries (1960-197

Pays et groupes	1960	1961	1962	1963	1964	1965	1966	196
MAROC (Casablanca) General	77.1	82.6	83.9	86.5	91.4	95.9	98.8	100.
Produits nationaux	78.4	84.3	86.5	89.3	92.0	96.2	98.8	102.
Produits importés	73.7	75.5	76.5	78.5	89.7	94.9	98.1	95.
Matériaux de construction	76.4	76.7	79.9	83.3	85.3	86.3	85.3	84.
Textiles 1/	88.6	94.9	95.1	94.3	98.8	92.7	96.9	90.
TUNISIE General	67.5	68.9	68.5	72.3	75.9	86.6	88.7	92.
Produits nationaux	69.3	72.5	71.4	74.4	74.9	82.2	86.2	90.
Produits importés	65.3	64.3	65.1	69.8	77.5	90.2	93.4	93.
EGYPTE 3/ General	72.3	73.0	72.3	72.3	75.2	81.0	87.9	/94.
Matériaux de construction	81.5	83.2	84.9	84.1	85.7	93.3	96.7	/95.
Textiles	79.9	78.2	78.2	84.1	85.7	89.1	98.3	/97.
Matières premières								89.
Produits intermédiaires								88.
Produits finis								98.
[illegible]N General	81.7	84.1	83.7	82.3	91.7	83.6	87.6	100.
Matières premières	104.2	105.3	97.2	91.9	100.9	107.0	90.7	86.
SENEGAL (Dakar) Matériaux de construction	72.1	75.4	78.5	79.7	81.2	85.9	87.5	88.
COTE D'IVOIRE (Abidjan)								
Matériaux de construction	72.3	72.2	73.2	73.4	75.6	75.7	77.2	77.
[illegible]IE 3/	80.1	86.1	85.8	86.7	89.5	90.2	89.3	96.
[illegible]. Général		54.2	-	57.2	61.3	70.4	71.0	77.
Produits finis		49.4	-	56.9	58.6	63.8	62.4	91.
Produits exportés		56.3	-	54.1	56.4	45.8	40.1	60.
Empire c. africain (Bangui)	67.3	78.3	73.1	76.5	83.6	89.2	89.4	93.
GABON 1/ (Libreville Gén.	56.1	61.8	65.0	68.0	72.5	75.5	73.5	/81.
ALGERIE 2/ Agriculture								
Production industrielle								
dont Energie et eau								
Industries extractives et minières								
Matériaux de construction								

NNEX IV

RODUCTION (1970 = 100)
ONAL CURRENCIES)

Indice 1970 = 100

1960	1965	1970	1971	1972	1973	1974	1975	Countries and groups
92.0	93.4	100.0	104.2	107.1	125.6	154.8	160.7	MOROCCO (Casablanca) General
91.0	92.1	100.0	106.1	112.8	133.4	164.9	173.0	Domestic goods
95.2	97.4	100.0	101.8	97.0	103.9	127.4	128.5	Imported goods
84.8	92.5	100.0	98.6	94.2	111.3	142.7	126.9	Building materials
93.1	95.3	100.0	104.6	108.1	114.9	122.7	129.1	Textiles 1/
95.0	96.2	100.0	107.4	109.0	114.8	139.1	152.3	TUNISIA General
95.0	96.2	100.0	109.7	111.1	116.5	133.3	145.2	Domestic goods
94.8	95.2	100.0	103.9	105.3	111.8	149.2	154.8	Imported goods
96.2	97.7	100.0	103.9	104.4	108.6	128.4	138.1	EGYPT 3/ General
95.1	96.0	100.0	107.1	108.8	115.7	138.2	156.3	Building material
99.3	101.8	100.0	103.6	104.6	101.2	104.5	105.7	Textiles
95.9	96.8	100.0	101.9	104.5	110.4	134.0	148.1	Raw materials
90.8	98.6	100.0	101.5	101.9	103.2	127.3	135.6	Intermediate product
101.7	101.4	100.0	103.2	103.9	104.0	118.0	122.7	Finished goods
89.4	96.5	100.0	96.9	105.3	122.4	158.5		SUDAN General
92.9	102.4	100.0	102.9	107.5	130.6	201.5		Raw materials
91.4	94.2	100.0	99.9	100.8	107.6	140.8		SENEGAL (Dakar) Bldg. materials
78.8	79.2	100.0	107.0	107.8	110.0	142.9		IVORY COAST (Abidjan) Bldg. materials
83.9	91.2	100.0	102.4	103.1	106.8			GAMBIA
88.9	95.1	100.0	98.8	117.5	147.9	188.4	234.4	GHANA General
96.5	97.8	100.0	96.5	109.6	124.2	150.1	207.4	Finished goods
86.3	95.3	100.0	88.7	109.8	165.1	246.3	263.9	Exported goods
95.8	96.4	100.0	105.9	112.8	115.6	111.9	151.9	C.A.R General
84.2	89.4	100.0	103.7	108.8	115.0	137.5	154.4	GABON 4/ (Libreville)
	96.0	100.0	109.5	115.8	121.1*	135.9*	151.4*	ALGERIA Agriculture
	97.5	100.0	103.6	104.4	108.3	117.0	131.6	Industrial production
	100.0	100.0	100.0	100.0	102.2	102.2		of which Energy and water
	84.7	100.0	98.7	98.2	112.3	165.8	186.5	Mining and quarrying
	99.3	100.0	100.8	102.4	113.5	130.6	137.4	Construction materi

Tableau/Table 1 : Prix de gros par groupe de produits pour quelques pays africains (1960-1975) (
Wholesale prices by commodity groups for selected African countries (1960-1975

Pays et groupes	1960	1961	1962	1963	1964	1965	1966	19
GABON Produits industriels	60.3	64.5	66.0	68.8	72.2	74.4	77.6	/79.
Produits nationaux								75.
Produits importés								83.
Biens d'équipement								78.
Biens de consommation								8
CONGO (Brazzaville)5/ Général				79.3 3/	84.3 3/	89.2	90.5	94.
ZAIRE 6/ (Kinshasa) Général 7/								
Matériaux de construction 9/								
AFRIQUE DU SUD Général	82.6	//81.8	82.3	83.4	85.4	88.1	91.4	93.
Produits nationaux	80.3	//79.5	79.8	81.0	85.2	86.4	90.2	93.
Produits importés	85.0	//84.2	85.5	86.9	89.1	90.7	93.4	95.
Matériaux de construction	82.3	//80.7	81.5	83.5	85.3	87.8	90.2	90.
Textiles	89.4	//89.4	90.5	93.0	94.4	95.7	98.3	98.
SOUAZILAND3/	77.0	78.5	79.0	80.7	82.1	85.4	88.5	91.
ZAMBIE8/ Général								
Général (cuivre exclu)								
Matériaux de construction 9/		73.1	73.3	74.4	78.1	82.0	89.2	/88.
Produits exportés								
Biens de consommation								
RHODESIE DU SUD Matériaux de construction 9/	80.8	78.4	80.0	81.5	83.4	85.2	87.6	89.
ETHIOPIE (Addis Abéba) Produits importés 10/	91.4	87.7	89.1	89.3	89.6	90.5	92.9	96.
Produits exportés11/	74.1	72.2	68.2	68.6	85.3	86.2	86.2	77.

Signes conventionnels : / Séries enchaînées aux précédentes // Séries non comparabl
Conventional signs : / Series linked to former ones // Series not comparabl

Notes : 1/ Y compris peaux/Including hides
2/ Source : World Bank/ Banque Mondiale
3/ A partir de 1970 Base Juillet 1969 -Juin 1970 = 100 Indices annuels: moyenne
terminant en Juin de l'année en question/ Base July 1969 - June 1970 = 100
averages of 12 months ending June of the year stated
4/ A partir de Janvier 1967 base Juin 1966 = 100/ From January 1967 Base June
5/ Source : International Financial Statistics May 1976

Sources : - Bulletin Mensuel de Statistique des Nations Unies Février 1969, Avril 1974 et
CEA à UN Monthly Bulletin of Statistics February 1969, April 1974 and April 1977
partir de: - International Financial Statistics Annual Data 1951-1975 May 1976
- World Bank Tables 1976
- Publications nationales/ National publications

uite)
(cont'ed)

Indice 1970 = 100

1968	1969	1970	1971	1972	1973	1974	1975	Countries and grou
82.3	87.0	100.0	104.3	110.1	118.6	146.9		GABON Industrial products
79.6	87.0	100.0	95.4	99.6	120.1	149.6		Domestic goods
86.1	90.5	100.0	106.7	112.1	115.0	139.5		Imported goods
80.9	86.1	100.0	104.0	119.7	119.4	146.7		Capital goods
89.0	94.4	100.0	103.7	106.7	111.8	136.5		Consumer goods
94.5	93.8	100.0	100.7	113.6	119.6	138.0	157.2	CONGO (Brazza.) Gener
		100.0	108.7	115.9	126.5	165.2	230.0	ZAIRE 6/ (Kinshasa) General 7/
		100.0	112.5	126.1	115.4	146.4	192.2	Building materials 9/
94.8	96.9	100.0	104.6	113.2	128.0	151.0	177.2	SOUTH AFRICA General
94.4	96.8	100.0	104.7	112.0	127.3	148.3	171.4	Domestic goods
95.2	97.5	100.0	104.6	117.3	131.0	160.5	196.4	Imported goods
92.1	95.4	100.0	103.7	108.3	120.9	143.3	174.8	Building materials
97.0	99.1	100.0	102.4	113.1	132.3	153.1	172.2	Textiles
93.8	97.0	100.0	100.9	107.8	115.6			SWAZILAND 3/
93.7	102.6	100.0	93.8	98.7	130.5	135.9	126.9	ZAMBIA 8/ General
95.3	97.5	100.0	105.3	114.5	122.9	143.1	160.9	(General excl. copper)
91.[illegible]	95.8	100.0	105.9	110.8	116.5	147.3	163.0	Building materials 9/
91.5	108.4	100.0	79.5	79.4	120.4	133.7	87.8	Exported goods
94.4	97.5	100.0	106.0	115.6	120.8	135.9	157.1	Consumers goods
92.4	95.8	100.0	103.1	106.6	114.0	132.6	151.6	SOUTHERN RHODESIA Building material 2/
98.2	98.8	100.0	105.0	108.2	113.8	125.0	131.4	ETHIOPIA (Addis Abeb Imported goods 10/
79.8	80.6	100.0	89.0	97.4	107.7	114.7	102.6	Exported goods 11/

---

s aux précédentes
to formers ones

de 12 mois
annual indexes

66 = 100

Février 1977/

6/ Banque du Zaïre
7/ Indice non pondéré/Unweighted index
8/ Source Bulletin mensuel de Statistique des Nations Unies Avril 1977. Ces séries diffèrent des précédents numéros/ Source UN Monthly Bulletin of Statistics April 1977. These series differ from previous numbers
9/ Coût des matériaux de construction/Cost of residential building materi
10/ Pondérés par la valeur des importations/ Weighted by value of imports
11/ Pondérés par la valeur des exportations/ Weighted by value of exports

Pays et monnaies/ Countries and currencies			1960	1961	1962	1963
Maroc/Morocco - Dirhams	[illegible]	[illegible]	(1,48)	1,48	[illegible]	[illegible]
Algérie/Algeria - Dinars	[illegible]	[illegible]				
Tunisie/Tunisia - Millimes	[illegible]	[illegible]	100-150	100-150	100-150	[illegible]
Egypte/Egypt - Piastres	[illegible]	[illegible]	238	[illegible]	[illegible]	[illegible]
Mali - Francs	[illegible]	[illegible]				
Sénégal - F CFA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Côte d'Ivoire/ Ivory Coast - F CFA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Haute Volta/ Upper Volta - F CFA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sierra Leone - Leones	[illegible]	[illegible]				
Ghana - Cedis	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Nigeria - [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cameroun/Cameroon - F CFA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Tchad/Chad - F CFA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Tableau 1 : Gains et taux de salaires dans quelques branches d'activité économique pour quelques pays africains (1960-1975) (suite)
Table 1 : Earnings and wage rates by kind of economic activity in selected African countries (1960-1975) (con'ed)

Monnaies nationales/National currencies

Pays et monnaies/ Countries and currencies	Catégories de salaire 1/ Categories of wages 1/	Branches d'activité 2/ Kind of economic activity 2/	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Gabon - F CFA	RT/m MP(I)	AGR 24/	4 200	4 550	4 550	5 005	5 005	6 070	6 666	7 080								
	EO/m	NON AGR 25/	6 700	8 650	9 100	10 000	11 000	12 000	/12 000	13 000								
	EO/m	MIN 25/	10 380	12 760	13 400	14 740	29 900	...	/32 900	32 900								
	EO/m	CONS 25/	6 900	9 000	9 000	9 900	13 000	19 000	/19 000	19 000								
	EO/m	TRAN 25/	10 000	12 000	12 600	13 860	22 500	25 800	/25 800	25 500								
Burundi26/ - Francs (Bujumbura)	EO/m MP(I)	AGR														3 108	3 306	3 558
	EO/m	NON AGR														3 726	5 109	5 028
	EO/m	MANUF														5 205	5 100	5 469
	EO/m	CONS												2 036	2 170	2 315	2 315	2 342
	EO/m	TRAN												3 925	4 197	4 225	4 096	4 186
Afrique du Sud/ South Africa - Total	RT/WB	NON AGR27/	94.4	94.4	97.9	100.0	101.3	107.5	110.6	115.6								
	RT	MIN 30/	6.00	6.10	6.14	6.27	8.04	7.97	8.69	11.25								
	EO/m	MANUF									103.80	107.40	115.20	126.20	135.50	150.50	179.80	201.10
	EO/m	CONS 28/									93.90	97.00	102.30	109.30	117.50	132.80	150.80	179.40
	EO/m	TRAN									145.70	155.30	172.90	185.30	184.50	220.30	245.50	283.20
Afrique du Sud Pop. blanche/ South Africa White pop.	RT	MANUF28/	95.4	96.8	98.2	100.0	100.1	103.1	105.5	109.1								
	EO/m	MANUF28/									252.70	272.50	299.50	334.40	357.40	390.70	447.60	509.90
	RT/WS	CONS28/	96.0	98.2	99.5	100.0	100.8	105.4	110.3	112.2								
	EO/m	CONS									266.20	290.40	317.00	351.90	372.40	410.50	446.30	508.80
	RT/WS	TRAN28/ 29/	86.8	90.2	99.5	100.0	101.5	111.3	112.2	113.3								
	EO/m	TRAN									240.20	259.20	295.40	314.40	320.30	382.80	429.50	508.10
Zambie/Zambia31/ Kwacha	EO/m MP I + II	AGR	10.0	10.0	10.6	11.0	14.6	14.4	16.7	20.7	29.3	30.0	23.3	28.1	33.0	34.7	34.9	
	EO/m	NON AGR	24.8	27.0	28.0	29.6	34.8	38.6	46.4	64.8	68.0	72.0	77.4	86.5	85.1	85.1	98.4	
	EO/m	MIN	47.2	48.2	49.4	49.6	61.0	68.8	77.9	110.2	104.0	117.7	122.8	129.7	131.3	131.3	141.3	
	EO/m	MANUF	19.7	22.8	23.7	28.8	33.8	40.5	40.3	56.3	52.9	62.0	65.0	72.6	75.3	73.7	86.5	
	EO/m	CONS	19.6	20.0	21.2	23.0	23.8	26.8	27.7	41.6	54.1	46.7	46.2	54.2	61.3	54.7	60.0	
	EO/m	TRANS	24.4	29.6	32.4	35.6	40.2	40.4	57.3	77.8	78.9	86.2	98.7	104.1	107.3	111.0	110.0	
Rodésie du Sud/ Southern - Pounds Rhodésia	EO/m MP II+a+b	AGR32/	4.9	5.0	5.1	5.6	5.6											
	EO/m	NON AGR33/	9.6	10.7	11.7	12.7	13.6											
	EO/m	MIN 33/	9.6	10.2	10.2	11.0	12.0											
	EO/m	MANUF 33/	10.4	11.8	13.7	15.3	16.5											
	EO/m	CONS 33/	8.8	9.8	10.2	12.4	14.6											
	EO/m	TRAN 33/	13.8	16.1	17.4	21.6	24.3											
Malawi34/ Pounds & Kwacha	EO/m MP(II)	AGR	3.2	3.1	3.2	/3.3	3.4				8.09	8.15	8.82	9.22	9.51	9.59	10.90	10.74
	EO/m	NON AGR	5.7	6.1	6.9	/7.2	7.1				33.42	36.27	37.13	37.06	36.84	37.71	40.99	42.67
	EO/m	MIN	3.8	4.3	4.1	/4.1	4.3				17.37	20.65	17.53	15.23	16.84	18.33	24.43	39.91
	EO/m	MANUF	5.3	5.5	6.6	/6.8	7.1	7.2			24.46	27.61	28.16	29.56	32.59	32.26	37.82	38.83
	EO/m	CONS	4.3	4.5	5.7	/5.4	5.1	6.2	7.8		20.60	24.50	28.27	25.47	25.70	26.60	30.39	33.06
	EO/m	TRAN	7.9	8.7	9.9	/9.8					43.53	47.06	49.87	51.94	52.91	56.21	58.61	62.38
Reunion FCFA	EO/dj AMP(I)	AGR35/	356	394	[illegible]	467	527	558	579									
	EO/h A	MANUF	56.90	62.90	66.37	71.75	76.55	84.74	92.28									
	EO/h A	CONS	60.06	66.40	70.00	74.30	81.50	91.02	93.22									
Maurice36/ Rupees Mauritius	EO/dj MP (II-a)	AGR37/							5.44	5.61	5.49	5.74	5.88	5.69	7.54	7.64	9.40	10.56
	EO/dj	NON AGR							5.86	5.71	5.67	5.62	5.94	6.58	7.58	7.64	9.69	11.48
	EO/dj	MIN 45/							3.13	3.48	3.29	3.64	3.73	4.17	4.20	4.30	5.06	7.20
	EO/dj	MANUF							5.79	5.66	5.68	5.95	6.30	6.02	6.30	[illegible]	7.18	8.47
	EO/dj	CONS							7.16	7.37	7.25	7.86	9.02	8.96	[illegible]	10.00	11.38	14.81
	EO/dj	TRAN							10.64	10.30	10.93	10.70	12.24	9.11	[illegible]	12.83	16.39	17.29
Kenya38/ - Shillings	EO/m MP	AGR39/		54	62	60	99	83	87		118.80	123.0	129.20	140.00	180.60	181.20	194.60	233.40
	EO/m	NON AGR40/									531.20	533.60	578.20	591.60	634.80	[illegible]	719.20	(812.22)
	EO/m	MIN 46/	143	135	154	193	175	299	304		390.60	533.60	549.80	580.80	[illegible]	601.40	603.20	(787.80)
	EO/m	MANUF 40/	160	190	201	229	198	242	266		553.00	572.00	639.60	620.80	[illegible]	[illegible]	728.20	(842.30)
	EO/m	CONS 40/	157	176	182	212	230	253	311		400.80	474.40	521.40	539.40	[illegible]	573.00	583.40	719.30
	EO/m	TRAN 40/	215	263	316	357	397	700	721		754.80	711.40	770.40	737.40	[illegible]	659.40	996.40	114.60
Tanzanie/Tanzania - Shillings	EO/m M(II)	AGR42/	55	67	80	112	118	/139	153	162	158	162	179	178	187			
	EO/m AM	NON AGR43/	113	126	154	199	222	/286	...	277	298	313	329	347	367			
	EO/m AM	MIN	96	113	141	171	188	/238	298	325	360	381	446	509	549			
	EO/m AM	MANUF	91	117	127	173	185	/258	293	328	391	351	370	390	414			
	EO/m AM	CONS	103	115	127	165	220	/252	262	306	343	308	307	307	269			
	EO/m AM	TRAN44/	187	149	230	277	269	/384	402	470	462	538	469	532	556			

Notes au tableau 1 de l'Annexe V/Notes to table 1 of Annex V

Sources :
CEA à Annuaire des Statistiques du BIT 1970, 1976/
partir de : ILO Year Book of Labour Statistics 1970, 1976.

Abreviations :

1) EG = Gains/Earning
RT = Taux/Rates
H = Heure/Hour
dj = jour/day
ws = semaine/week
m = mois/month
A = Adultes/Adults
M = Hommes/Males
F = Femmes/Females

(I) Montant total du salaire (cas des travailleurs entièrement rémunérés en espèces)/ Complete wage (worker remunerated wholly in cash)

(II) Partie de la rémunération payée en espèces (cas des travailleurs rémunérés partiellement en espèces et partiellement en nature). Ces chiffres peuvent comprendre la valeur estimée des paiements en nature pour :

a) les repas

b) les logements

Cash part of remuneration (where received partly in cash and partly in kind). These figures may include the estimated value of payments in kind for :

(a) board

(b) lodging

2) AGR = Agriculture
NON AGR = Secteurs non agricoles/Non agricultural sectors
MIN = Industries extractives/Mining & quarying
MANUF = Industries manufacturières/Manufacturing
CONS = Construction
TRAN = Transport
( ) données inférieure à une année/data less than one year
// Nouvelle série remplaçant la précédente/New serie replacing former one
* Estimé/Estimated

3) Ouvriers permanents et saisonniers. Taux minima, Décembre de chaque année/ Permanent and seasonal workers. Minimum rates, December of each year

4) Mines de charbon, ouvriers du fond/Coal mining, underground workers

5) Casablanca, taux minima/Casablanca, minimum rates

6) Avril de chaque année/April of each year

7) Ouvriers agricoles, gains journaliers minima : non compris les suppléments de salaire, Décembre de chaque année/Agricultural workers, minimum daily earnings, excluding wage supplements, December of each year

8) Octobre de chaque année/October of each year

9) Décembre de chaque année/December of each year

10) Ouvriers qualifiés/Skilled workers

11) Ouvriers agricoles, taux minima/Agricultural workers, minimum rates

12) Ouvriers non qualifiés, taux minima/Unskilled workers, minimum rates

13) Ouvriers permanents/Permanent labourers

14) Mai et Novembre de chaque année/May and November of each year

15) Non compris le commerce et les services/Excluding commerce and services

16) Y compris les transports par mer/Including sea transport

17) Décembre de chaque année/December of each year

18) Ensemble des ouvriers, y compris les employés/All workers including salaried employees

19) Ouvriers stables, Zone 1, taux minima/Regular labourers, minimum rates

20) Jusqu'en 1966 ouvriers du fond des mines de houille/Up to 1966 underground workers in hard coal mining

21) Journaliers, taux minima, Décembre de chaque année/Day labourers, minimum rates December of each year

22) Ouvriers qualifiés, taux moyens/Skilled workers, average rates

23) Ouvriers agricoles/Agricultural workers

24) Ouvriers non qualifiés, taux minima/Unskilled workers, minimum rates

25) Ensemble du pays (1960-1965) 1ère zone, ouvriers non qualifiés/Whole country (1960-1965) 1st zone unskilled workers

26) Y compris les employés - y compris les allocations familiales/ Including salaried employees - including family allowances

27) Non compris les services, taux minima 1963 = 100/Excluding services minimum rates 1963 = 100

28) 1963 = 100

29) Bâtiment seulement/Building only

30) Mines du charbon du Transvaal, par poste, y compris certaines primes mais non compris les paiements pour heures supplémentaires, allocations de cherté de vie et autres allocations. Hommes adultes, population blanche, mai de chaque année/ Coal mining in Transvaal, per shift, including some bonuses but excluding overtime pay, cost of living and other allowances, white adult males, May of each year.

31) Zambiens, ensemble des ouvriers, y compris les employés, Juin de chaque année, 1967-1973 4è trimestre du chaque année, y compris les allocations familiales et la valeur des paiements en nature/
Zambian, all workers including salaried employees, June of each year 1967-1972 4th quarter of each year including family allowances and the value of payments in kind

32) Africains ensemble des ouvriers/Africans all workers

33) Africains, y compris la valeur des paiements en nature/Africans, including the value of payments in kind

34) Ensemble des ouvriers y compris les employés 1960-1966, y compris la valeur des paiements en nature/All workers, including the value of payments in kind

35) Journaliers/Day labourers

36) Mai et Septembre de chaque année/May and September of each year

37) Plantation de canne à Sucre, de thé et de tabac/Sugar cane, tea and tobacco plantations

38) Juin de chaque année y compris les employés/June of each year including salaried employees

39) Avant 1968, journaliers occasionnels, hommes/Before 1968 casual day labourers, males

40) Y compris la valeur des paiements en nature/Including the value of payments in kind

41) Juin de chaque année/June of each year

42) Ouvriers permanents et saisonniers/Permanent and seasonal workers

43) Y compris l'agriculture/Including agriculture

44) Non compris les chemins de fer de l'Est African/Excluding East African Railways

45) Ouvriers qualifiés. Pétrole, ensemble du pays, 1960-1964 1ère zone/ Skilled workers. Petroleum, whole country 1960-1964, 1st zone.

Note au tableau 2 de l'Annexe V/Notes to table 2 of Annex V

Source : CEA à partir de : The growth of World Industry General Industrial Statistics
Vol I Editions 1967, 1969, 1970, 1973, 1974, 1975 (non publié/non published
UN Yearbook of Statistics 1963-1972 ,1964-1973,1965-1974

Signes conventionels : * Estimation
Conventional signs : / Série non comparable avec la précédente/Serie not comparable with former ones

Abréviations : MIN = Industries extractives/Mining
MANUF = Industries manufacturières/Manufacturing
ELEC = Electricité gaz et énergie/Electricity gas and power
CONS = Construction

Notes : 1/ Salaires versés divisés par le nombre des effectifs employés ou personnes engagées/
Wages paid divided by the number of persons employed or engaged

2/ Electricité et gaz seulement/Electricity and gas only
3/ Pétrole et gaz seulement/Petroleum and gas only
4/ Electricité seulement/Electricity only
5/ 12 mois commençant le premier juillet de l'année commencée/12 months beginning 1st July of beginning year
6/ Y compris suppléments/Including supplements
7/ Y compris paiements pour le travail à domicile/Including payments to homework
8/ Salaires moyens des personnes engagées/Average wages of persons engaged
9/ Electricité, gaz et vapeur/Electricity, gas and steam
10/ Industries extractives de minerais métalliques/Metal ore mining
11/ Non compris paiements en nature/Excluding payments in kind
12/ Y compris contribution des employeurs aux caisses de retraite, médicales et autres/ Including employer's contribution to pension, medical and similar schemes
13/ Commençant Décembre de chaque année/Beginning December of each year
14/ Mines de sel seulement/Salt mining only
15/ Etablissements avec au moins 10 employés/Establishments with less than 10 employees moyenne Mars-Septembre
16/ Année commençant 30 juin/Year beginning 30 June
17/ Y compris rations gratuites/Including free allowances
18/ Classé sous la rubrique autres mines/Under item other mining
19/ Y compris employés/Including employees
20/ Secteur privé seulement/Private sector only
21/ Secteur public seulement/Public sector only
22/ Non compris mines de sel/Excluding salt mining

Tableau 2 : Salaires moyens par employé[1/] dans quelques branches d'activité économique pour quelques pays africains (1960-1974)
Table 2 : Average wages per employee[1/] by kind of economic activity in selected African countries (1960-1974)

Monnaies nationales/National currencies

Pays/ Countries	Monnaies/ Currencies	Branches d'activité/ Kind of economic activity	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Tunisie/Tunisia	Dinar	MIN				522.7			565.6	596.0	556.9	544.7	530.6	615.0	670.0	743.6	960.5
		MANUF				390.2			458.6	487.7	497.1	552.3	538.1	594.8	652.1	645.8	758.7
		ELEC 2/				652.9			849.3	661.2	919.1	855.7	861.2	910.2	1 049.1	1 197.8	1 092.4
		CONS				255.2	275.2	299.7	257.9	304.3	329.5	376.3	395.0	425.7	395.1	423.5	
Libye/Libya	Dinar	MIN 3/							2 341	2 505	2 518	2 895	3 423	3 084	3 066	2 848	3 151
		MANUF							467	584	689	778	788	754	836	927	1 169
		CONS								707.4	1 009.6	970.9	1 054.4	977.3	840.9	984.7	
Egypte/Egypt	Pound	MIN	343.9	316.5	262.5				340.8	309.8	257.1	385.9	451.7	431.6	486.0		
		MANUF	145	152	165				244	258	250	283	272	277	304		
		ELEC 4/	112	226	222						261		309	371	382		
		CONS 5/							180.4 21/	181.7 21/	182.5	211.8	187.3	190.4	198.6	202.5	
Côte d'Ivoire/ Ivory Coast	F(CFA)	CONS 6/								380 952	381 679	381 944	505 882	535 922	506 108	473 433	527 382
Ghana	N. Cedis	MIN 7/				418			452	497	549		608 8/	660 8/	755 8/		
		MANUF				455			546	594	609		787 8/	851 8/	932 8/		
		ELEC				370			500	476			842	825 8/	827 8/		
		CONS				380.9	368.8	327.7	342.1	414.3	447.2	442.0	466.1	455.8			
Togo	F(CFA)	MIN											491 333	398 235	486 111		
		MANUF											191 600	223 300	336 667		
		ELEC 9/											295 000	337 143	378 571		
Nigeria	Pound	MIN 10/				75.90				86.22	82.38	89.90	88.53	73.46	70.99	86.48	
		MANUF				202.48			250.75	263.51	259.14	256.15	268.12	307.12	324.56	347.80	412.68
Cameroun/Cameroon	F(CFA)	MIN											627 975	549 242	853 261		
		MANUF											297 120	312 950	378 506		
		ELEC											522 137	665 283	684 431		
Empire centrafricain/ Central African Empire	F(CFA)	MANUF										168 040	133 926		181 443	289 565	
		CONS								94 954		149 515	178 222*	212 154			
Congo	F(CFA)	MIN											380 000	178 136		173 527	
		MANUF											313 631	594 171		316 671	
		ELEC											657 798	810 359		784 058	
Zaïre	Zaïre	MIN									325.8	586.4	656.6 8/	519.4 8/	572.4 8/		
		MANUF									233.5	445.5	544.1 8/	455.2 8/	501.6 8/		
		ELEC									...	...	467.7 8/	458.3 8/	516.5 8/		
		CONS									246.5	273.4	360.6	467.6	622.6		
Rwanda	Francs(R)	MIN 11/ 12/									21 374	22 253	24 595	24 059	25 566	35 021	36 567
		MANUF 12/									44 704	53 874	44 421	43 308	42 144	50 422	58 675
		ELEC 12/									62 265	75 861	185 104				
		CONS								22 388	27 886	29 592	26 962	31 816	30 090	49 507	
Burundi	Francs(B)	MANUF										7 912	14 663		16 406	21 893	38 821
Angola	Escudo	MIN 8/											1 557	3 031	3 574		
		MANUF 8/											2 011	2 226	1 532		
Afrique du Sud/ South Africa	Rand	MIN	375.8 8/	382.5 8/	392.7 8/	414.2	436.8	472.2	497.1	534.7	556.1	570.3	505.7	637.8	701.6	846.6	1 146.0
		MANUF 8/	802.8 8/	843.6 8/	868.2 8/	867.3	895.1		1 032.0		1 158.7		1 192.6		1 155.0		
		ELEC 8/	833.3 8/	900.0 8/	933.3 8/	941.2			111.1		1 256.4		1 534.9				
		CONS 8/				713.6		921.2		985.7		1 074.2		1 306.9			
Botswana	Rand	CONS												472.8	74.2	113.6	163.9
Souaziland/ Swaziland	Rand	MIN 8/									814.1		925.0	1 018.1	1 194.6	1 365.6	
		MANUF 8/									576.8		590.2*	549.2*	525.4*	472.4*	
		ELEC 8/									846.9		774.5	618.8	1 154.9	1 165.3	
		CONS							503.1	714.0		645.3	643.7	615.2	929.1		
Zambie/Zambia	Kwacha	MIN 12/	1 149.1	1 147.8	1 254.8	1 306.0	1 508.5	1 458.5	1 566.6	1 753.7	1 910.6	1 811.4	2 256.8	2 237.9	2 063.5	2 251.9	
		MANUF 12/	591.1	683.5	663.9	704.8	736.6	825.6	761.0	927.4	1 092.4	1 080.7	1 145.2	1 254.9	1 332.9	1 468.1	
		ELEC 4/ 12/	1 074.0	1 120.8	1 338.4	1 159.5	1 335.6		1 272.1	1 684.7	953.1	1 318.7	1 432.6	1 338.6	1 577.3	2 068.8	
		CONS 13/				491.4	582.0	384.1	482.4	519.8	645.6	755.7	837.9	900.3	959.7		
Rhodésie du Sud/ Southern Rhodesia	Dollar	MIN	325.2	355.8	379.4	405.3	434.5	475.2	501.0	491.3	531.5	559.6	570.3	609.7	857.2	704.9	
		MANUF 8/	628.2	681.5	751.0	792.3	840.8	881.5	900.3	922.8	942.6	950.6	1 002.6	1 043.3	1 106.5	1 201.8	
		ELEC 8/	925.0	1 015.8	1 007.7	985.4	1 241.1	1 243.4	1 220.1	1 353.2	1 349.2	1 455.2	1 449.0	1 591.2	1 666.7	1 933.3	
		CONS				618.8	718.1	721.7	765.1	763.9	773.1	844.3	889.0	879.4	932.0	987.6	
Malawi	Kwacha	MIN								152.3 8/	232.7	209.9	191.3	219.8	347.8	236.1	
		MANUF 8/							326.0 8/	335.5 8/	319.0	330.6	411.1	407.0	394.8	417.2	
		ELEC 8/								545.5 8/	580.2	579.8	643.5	601.7	608.9	604.4	
		CONS								285.5 20/	246.2	294.0	339.3	205.7	308.4	319.3	
Mozambique	Escudo	MIN								7 586	8 923	8 485	9 058	9 950	9 550	9 343	
		MANUF 8/								13 913	14 904	15 458	15 208	18 342	19 509	21 480	
		ELEC 8/								28 113	23 618	25 588	30 684	35 923	37 965	38 640	
Madagascar	Francs(M)	MIN 14/										140 974	165 418	153 873	184 059	241 645	298 454
		MANUF 8/									160 819	170 940	182 290	205 287	221 737	239 493	269 470
		ELEC 8/									261 790	387 356	440 520	366 766	402 430	505 902	588 911
Maurice/Mauritius	Rupee	MIN 14/									1 714	1 780	1 780	1 637	1 860		
		MANUF								2 750	2 997	2 934	2 934	2 925	3 156		
		ELEC								3 911	4 699	5 480	5 480	4 502	5 194		
		CONS 15/							1 779	1 790	2 070	1 660	2 076	2 331	2 316	2 529	
Tanzanie/Tanzania	Shilling	MIN											8 668	9 452	10 121	8 687	
		MANUF											4 606	4 536	4 919	5 838	
		ELEC											5 795	6 221	(13 522)	6 261	
		CONS 16/ 17/				4 058	3 712	4 604	2 632	2 826	2 657	2 644	2 934	3 041	2 886	2 972	
Ouganda/Uganda	Shilling	MIN 18/ 22/				1 410			2 103	3 025	3 180	3 985	4 192*	4 399			
		MANUF 8/				3 136			3 473	4 707	4 232	4 522	4 598*	4 673			
		ELEC 8/				3 881			4 369	4 659	4 276	4 440	4 610*	7 897			
		CONS							1 953	2 141	2 147	2 078	2 068 19/	2 457	2 692	2 267	
Kenya	Pound	MIN 8/				461			385	391	439	514	378	437	356	354	319
		MANUF				284			328	362	376	391	377	390	385	410	567
		CONS				199.3	193.2	194.2	214.7	255.0	337.0	365.6	371.8	347.6	317.6	384.9	
Somalie/Somalia	Shilling	MANUF 8/								2 384	4 614	4 409	5 499	4 934	4 351	4 423	
		ELEC 8/								8 538	9 360	8 711	9 806	7 147	7 094	8 118	
Ethiopie/Ethiopia	Birr	MANUF				663.5			978.6	1 099.3		1 273.0	1 276.4	1 332.3	1 382.0	1 456.5	
		ELEC				2 037.6			2 483.7	2 714.4	2 729.1	2 644.5	2 648.0	2 600.0	2 715.7	1 575.2	

077-654

Tableau 1 : Valeurs moyennes des exportations totales africaines[1/] par produit (1960-1975) (
Table 1 : Unit values of total African 1/ exports by commodity (1960-1975) (con'd)

	1960	1961	1962	1963	1964	1965	1966
PRODUITS MINERAUX/ (suite) MINERAL PRODUCTS (cont'd)							
Phosphates	111.3	108.0	100.0	109.1	113.4	117.0	121.1
Pétrole, brut/Petroleum, crude	118.8	117.8	110.8	99.7	91.0	95.8	93.8
Diamants/Diamonds	83.6	139.9	90.3	74.1	[illegible]	[illegible]	93.3
TOTAL PRODUITS MINERAUX/ TOTAL MINERAL PRODUCTS	84.4*	86.9*	83.5*	81.2*	87.2*	[illegible]	[illegible]
TOTAL PRODUITS AGRICOLES ET MINERAUX/TOTAL AGRICULTURAL AND MINERAL PRODUCTS	85.[illegible]*	85.6*	81.5*	82.6*	83.0*	82.5*	90.5

Source : CEA à partir des publications nationales/
ECA from national publications

Notes : 1/ Non compris Rhodésie du Sud/Southern Rhodesia non included

2/ Indice non calculé avant 1966. Enchaîné à l'indice des prix des exportation
Index not computed before 1966. Linked to the index of world price exports

3/ Sucre brute seulement avant 1966/
Raw sugar only before 1966

4/ Aluminium seulement avant 1966/
Aluminium only before 1966

ite)

Indice 1970 = 100

1967	1968	1969	1970	1971	1972	1973	1974	1975
107.5	109.7	100.0	100.0	98.7	106.1	125.3	457.3	654.0
96.0	102.0	93.0	100.0	135.6	165.3	237.2	715.2	613.5
96.7	97.0	90.9	100.0	84.6	97.5	151.0	154.9	138.5
91.0	95.5	90.9	100.0	115.2	131.5	190.7	504.7	442.7
[illegible]	94.8	97.4	100.0	108.5	123.5	155.7	393.7	...

mondiales (1960-1966)/
59-1966)

VALEURS MOYENNES DU COM
UNIT VALUES OF EXT

Tableau 1 : Valeurs moyennes des exportations totales africaines 1/ par produit (1960-1975)
Table 1 : Unit values of total African 1/ exports by commodity (1960-1975)

	1960	1961	1962	1963	1964	1965
PRODUITS AGRICOLES/ AGRICULTURAL PRODUCTS						
Fèves de cacao/Cocoa beans	74.0	58.4	54.8	58.4	62.4	47.2
Café/Coffee bean	67.2	65.1	63.1	67.2	87.3	77.9
Thé/Tea	115.3	114.3	105.5	108.9	106.7	111.1
Vin 2//Wine	102.8*	107.0*	114.0*	116.8*	110.8*	111.2*
Arachides/Groundnuts	94.3	90.1	95.0	85.0	88.4	94.3
Palmistes/Palm nuts kenels	101.8	80.1	77.2	87.7	80.7	107.1
Graines de sésame/Sésame seed	...	...	...	...	...	...
Huile d'arachide/Groundnut oil	108.6	108.6	103.5	100.5	103.5	105.6
Huile de palme/Palm oil	97.7	100.5	92.9	94.8	96.7	100.4
Huile de palmiste/Palm kenel oil	83.6	63.4	58.2	74.7	79.1	90.5
Huile d'olive 2//Olive oil	85.1*	81.0*	96.4*	133.3*	85.1*	96.4*
Bananes/Bananas	104.0	109.4	103.0	107.2	107.2	103.0
Coton brut/Cotton raw	98.2	95.6	85.8	88.5	87.6	95.6
Sisal/Sisal	177.4	161.9	169.7	257.2	246.9	159.4
Caoutchouc/Rubber	164.5	129.3	120.6	125.6	123.6	114.3
Sucre brut et rafiné 3// Sugar raw and refined 3/	106.9	104.4	93.4	122.7	114.2	90.4
Agrumes/citrus fruits	83.1	111.6	109.1	124.1	105.5	108.0
Riz/Rice	89.6	96.8	113.3	102.9	113.3	117.4
Tabac non manufacturé 2// Tobacco raw	68.2*	69.8*	69.0*	73.8*	75.4*	77.0*
Bois/Wood	79.5	81.2	81.2	84.5	91.3	91.3
TOTAL PRODUITS AGRICOLES/ TOTAL AGRICULTURAL PRODUCTS	87.8*	83.5*	77.6*	85.3*	90.3*	85.3*
PRODUITS MINERAUX MINERAL PRODUCTS						
Colbat	...	...	...	...	...	...
Zinc	79.5	76.6	70.0	72.9	96.3	105.8
Minerai de manganèse/ Manganese ore	161.8	171.3	159.1	136.0	123.7	125.1
Plomb/Lead	69.1	59.7*	52.3	59.7*	94.2*	108.8*
Cuivre/Copper	42.2	40.8	39.6	42.6	42.2	49.0
Bauxite aliminium 4/	86.3*	86.3*	86.3*	86.3*	88.3*	88.9*
Etain/Tin	65.6	37.9	66.3	67.7	84.0	102.3
Minerai de fer/Iron ore	122.7	118.2	110.1	114.7	97.5	99.7

RCE EXTERIEUR (1970 = 100)/
NAL TRADE (1970 = 100)

Indice 1970 = 100

6	1967	1968	1969	1970	1971	1972	1973	1974	1975
.4	95.8	75.8	55.7	100.0	75.8	71.5	102.0	161.5	180.9
.6	82.7	83.3	75.0	100.0	97.0	99.2	122.2	139.4	135.5
.1	110.4	108.9	95.4	100.0	103.0	103.0	98.0	111.6	135.0
.2	101.9	96.3	97.9	100.0	93.5	107.1	146.3	160.9	180.5
.3	74.2	77.3	86.2	100.0	120.0	126.1	156.7	196.3	137.7
.7	85.1	111.4	93.3	100.0	93.0	72.0	126.2	237.9	115.1
.5	106.4	94.1	91.8	100.0	120.3	134.3	132.5	231.6	245.5
.5	94.7	79.0	92.3	100.0	115.4	114.8	126.8	255.3	...
.5	97.2	91.3	66.3	100.0	109.4	102.3	139.5	264.4	129.6
.6	82.0	115.4	79.0	100.0	95.4	75.1	94.3	255.2	159.8
.4	106.0	104.8	102.3	100.0	107.2	115.7	179.1	165.4	287.0
.0	105.4	101.4	91.9	100.0	107.5	112.0	126.6	134.3	...
.6	86.4	95.1	101.3	100.0	109.8	111.7	137.3	222.0	200.3
.4	118.5	104.1	112.1	100.0	101.0	124.2	253.5	585.3	...
.0	92.7	85.4	106.8	100.0	83.2	73.7	125.7	176.9	117.5
.7	97.0	91.5	98.9	100.0	112.3	134.3	158.8	321.3	...
.6	105.5	107.7	110.2	100.0	113.1	117.2	129.6	130.9	...
.4	128.2	144.9	132.8	100.0	95.7	99.6	192.2	586.6	...
.8	88.1	89.0	97.8	100.0	108.4	110.2	125.1	148.6	...
.6	94.7	95.6	99.4	100.0	95.7	111.6	193.7	243.0	205.9
.1	85.5	90.0	94.8	100.0	97.0	101.0	133.6	301.5	...
.5	76.6	80.6	85.2	100.0	121.3	116.0	143.1	120.9	137.3
.5	95.0	88.3	96.6	100.0	110.1	139.7	180.3	256.1	257.3
.5	140.4	115.6	109.5	100.0	112.4	116.5	140.9	186.5	231.1
.0	72.5	80.7	95.5	100.0	87.2	84.8	101.8	178.9	140.3
.0	71.0	82.0	95.5	100.0	71.3	69.7	110.4	143.1	91.4
.8	97.2	105.7	105.9	100.0	105.6	106.3	110.7	117.4	141.8
.4	87.0	83.7	87.7	100.0	97.8	99.5	101.0	155.3	173.2
.1	101.3	96.6	98.9	100.0	108.7	112.9	114.8	148.7	242.4

Tableau 2 : Valeurs moyennes des exportations agricoles de quelques pays africains (1960-1
Table 2 : Unit values of agricultural exports for selected African countries (1960-1974)

	1960	1961	1962	1963	1964
TUNISIE/TUNISIA		70.9	74.5	75.7	70.2
LIBYE/LIBYA			125.0	117.6	136.4
EGYPTE/EGYPT					85.1
SIERRA LEONE				64.9	81.7
LIBERIA					148.5
GHANA					
NIGERIA	83.9	71.1	69.5	71.5	74.6
ZAIRE					
ZAMBIE/ZAMBIA					
TANZANIE/TANZANIA					115.0
OUGANDA/UGANDA	72.4	77.8	61.9	69.0	84.2
KENYA					97.0
ETHIOPIE/ETHIOPIA					

Source : CEA à partir des publications nationales/
ECA from national publications

74) exprimées en monnaies nationales/
xpressed in national currencies

Indice 1970 = 100

965	1966	1967	1968	1969	1970	1971	1972	1973	1974
3.8	75.9	96.0	95.5	97.7	100.0	104.0	103.4	128.6	137.7
1.8	192.3	176.5	95.2	111.1	100.0	.	.		
.3	85.7	83.9	98.2	104.6	100.0	99.0	103.7	139.5	
.0	67.4	83.1	92.3	95.5	100.0	110.9	105.8	122.9	
.5	108.1	97.1	92.0	106.2	100.0	45.5	42.7	58.9	
			70.0	67.9	100.0	75.7	90.5	127.8	202.3
.4	90.8	84.1	79.8	92.6	100.0	91.4	81.1	104.5	
			89.0	82.4	100.0	95.6	90.0	115.8	158.3
.9	85.0	121.5	103.4	116.2	100.0	104.3	101.7	99.4	121.1
.0	101.0	100.0	99.0	99.0	100.0	101.0	111.0	141.0	179.0
3.5	86.1	87.5	94.0	88.2	100.0	107.3			
.0	95.0	90.0	90.0	89.0	100.0	96.0	107.0	121.0	154.0
					100.0	89.0	94.0	108.0	115.0

Tableau 2 bis : Valeurs moyennes des exportations agricoles de quelques pays africains (19
Table 2 bis : Unit values of agricultural exports for selected African countries (19

	1960	1961	1962	1963	1964	1965
Maroc/Morocco	80.0	84.3	82.7	101.6	97.5	106.0
Algérie/Algéria	125.3	124.7	...	115.1	112.0	133.0
Egypte/Egypt	66.8	66.9	75.0	82.6	85.7	90.1
Mauritanie/Mauritania	...	120.1	116.5	70.1	113.1	118.1
Sénégal	87.1	87.2	90.1	88.2	88.2	94.7
Mali	-	30.4	27.4	26.9	40.7	41.0
Côte d'Ivoire/Ivory Coast	65.8	66.0	65.2	67.5	73.3	67.7
Haute Volta/Upper Volta	55.1	...	56.4	64.9	90.5	107.5
Bénin	81.7	85.4	59.1	83.6	70.7	85.4
Niger	90.0	88.3	72.9	101.5	95.6	97.5
Cap Vert/Cape Verde	...	...	...	...	...	...
Gambie/Gambia	65.5	37.9	39.3	51.8	54.0	84.8
Guinée/Guinea	70.2	84.4	83.8	...	...	91.5
Sierra Leone	69.3	56.0	55.1	64.9	81.7	78.0
Togo	73.3	59.1	57.6	61.3	66.8	70.4
Nigéria	83.9	71.1	69.5	71.5	74.6	71.4
Cameroun/Cameroon	74.1	66.0	63.8	68.5	73.3	66.8
Tchad/Chad	38.1	45.0	40.7	43.0	42.2	45.2
Empire centrafricain/Central African Empire	84.0	84.7	77.0	81.4	87.5	83.2
Gabon	42.8	45.4	43.9	44.8	45.9	45.7
Congo	64.0	64.8	64.5	68.0	70.8	75.3
Guinée équatoriale/Equatorial Guinea	...	...	...	...	...	...
Sao Tomé & Principe	82.3	60.4	53.5	67.4	58.4	59.3
Zaïre	...	...	...	...	...	99.2
Rwanda	...	...	...	27.2	34.8	38.7
Burundi	...	...	...	...	43.0	80.0
Angola	73.6	64.1	64.6	77.0	98.7	83.8
Mozambique	75.8	83.0	77.0	86.2	87.1	91.9
Madagascar	103.3	89.2	85.1	90.0	89.9	85.7
Comores	122.8	100.0	101.4	104.1	97.8	97.5
Réunion	79.1	78.9	68.6	81.9	78.9	74.9
Djibouti						

Source: CEA à partir des données de la FAO et des publications nationales.
ECA from FAO data et publications nationales.

-1975) exprimée en monnaies nationales
5) expressed in national currencies

Indice 1970 = 100

1966	1967	1968	1969	1970	1971	1972	1973	1974	197
15.7	110.1	108.0	101.4	100.0	100.5	105.7	112.0	141.4	121.
13.0	111.9	107.3	95.5	100.0	91.6	103.5	97.1	93.7	94.
86.1	76.0	95.3	101.9	100.0	100.0	101.0	117.0	207.6	...
15.3	...	...	...	100.0	105.3	117.0	127.0	127.7	121.
05.1	85.1	75.7	95.7	100.0	107.4	102.0	130.6	156.4	172.
37.4	98.1	75.1	94.1	100.0	95.0	93.7	90.8	101.5	10 .4
74.0	72.4	81.3	98.3	100.0	95.7	89.4	112.5	123.5	1 .
7.7	111.8	115.7	130.5	100.0	95.6	114.7	147.0	177.3	158.5
73.5	85.1	93.9	90.8	100.0	98.2	106.4	120.5	154.0	145.
25.5	82.8	87.6	94.3	100.0	100.0	118.5	105.1	155.9	13 .2
71.5	87.5	103.8	94.0	100.0	115.9	124.4	136.0	139.5	13 .
70.4	81.7	73.6	93.1	100.0	110.6	122.2	125.7	152.2	1 .
95.5	98.0	100.6	107.6	100.0	91.1	94.0	87.6	105.5	
7.4	83.1	87.3	95.6	100.0	110.9	105.8	122.9	221.7	2 .
58.5	76.6	77.3	102.4	100.0	85.1	80.7	95.7	107.4	11 .
90.8	84.1	75.8	92.6	100.0	91.4	81.1	104.5	144.0	10 .
.5	70.0	70.0	97.3	100.0	91.0	101.5	132.4	135.4	15
48.7	52.0	97.7	47.3	100.0	97.6	103.1	105.1	105.5	105.
5.5	91.8	96.7	93.2	100.0	107.3	113.5	139.0	132.9	120.7
45.3	44.7	45.7	52.3	100.0	105.0	109.9	118.4	158.3	141.
81.9	84.3	83.5	101.3	100.0	99.5	119.9	177.2	159.0	15 .
...	...	...	...	100.0	96.0	92.5	94.9	128.5	1 .
55.3	60.7	95.2	108.3	100.0	74.2	75.2	133.5	202.0	175.
92.0	99.0	83.6	82.4	100.0	95.5	90.0	115.8	168.3	17 .
65.4	72.7	75.3	96.1	100.0	79.0	80.1	88.3	125.5	110.
77.3	74.0	71.6	95.3	100.0	88.3	99.5	123.2	127.4	184.
96.7	89.1	88.0	85.1	100.0	102.9	103.5	121.9	124.4	12 .1
93.4	91.3	90.2	98.0	100.0	104.1	112.4	132.0	132.4	123.4
87.4	84.1	80.9	92.0	100.0	101.8	107.1	115.9	114.8	113.
90.8	91.6	93.2	95.7	100.0	81.3	102.9	105.9	99.5	9 .
76.5	75.6	58.7	105.0	100.0	77.7	87.6	84.7	110.1	10 .
				100.0	100.0	103.4	130.6	120.3	11 .

Tableau 3 : Valeurs moyennes des exportations minérales de quelques pays africains (1960 - 1974) exprimées en monnaies nationales
Table 3 : Unit values of mineral exports for selected African countries (1960-1974) expressed in national currencies

Indice 1970 = 100

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
TUNISIE/TUNISIA		91.7	76.9	82.3	83.2	109.7	108.8	100.8	97.5	103.6	100.0	121.3	126.2	162.4	452.2
LIBYE/LIBYA			113.8	114.9	113.4	94.7	93.1	96.3	102.5	99.8	100.0				
EGYPTE/EGYPT					106.0	97.4	94.0	90.4	102.4	100.4	100.0	84.4	92.2	88.0	
SIERRA LEONE				78.4	89.5	95.1	92.1	100.2	104.2	112.6	100.0	99.2	118.8	200.3	
LIBERIA					103.1	95.8	100.4	104.0	98.7	105.9	100.0	135.9	140.5	149.8	
GHANA									115.7	113.7	100.0	109.0	153.3	173.7	221.4
NIGERIA	100.3	97.9	97.2	105.5	108.9	103.9	96.8	96.7	105.9	101.7	100.0	134.9	139.6	157.6	
ZAIRE									85.7	102.0	100.0	72.5	74.5	108.5	130.8
ZAMBIE						54.7	77.3	72.6	80.4	99.4	100.0	100.6	125.6	130.1	197.5
OUGANDA/UGANDA	55.4	50.3	50.0	51.8	74.0	101.4	81.2	81.1	75.4	80.7	100.0	91.5			

Source : CEA à partir des publications nationales
ECA from national publications

Tableau / Table 3 bis : Valeurs moyennes des exportations minerales de quelques pays africains (1960 - 1975) exprimées en monnaies nationales / Unit values of mineral exports for selected African countries (1960 - 1975) expressed in national currencies

Indice 1970 = 100

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Maroc/Morocco	104.9	101.0	99.8	100.4	110.6	111.6	111.7	109.8	104.0	105.5	100.0	98.7	96.6	97.0	595.0	465.9
Algérie 1//Algéria	143.2	143.0	...	128.2	106.6	100.7	98.0	95.8	99.0	100.9	100.0	127.1	135.7	170.7	503.2	502.6
Egypte/Egypt	77.2	72.7	96.5	98.7	101.3	91.2	94.1	92.6	101.1	108.7	100.0					
Mauritanie/Mauritania	...	...	...	89.3	91.1	95.1	94.3	89.9	87.5	109.6	100.0	104.1	99.1	104.3	123.4	166.3
Sénégal	81.0	81.8	82.7	82.3	83.0	78.5	82.3	78.4	83.8	96.6	100.0	90.8	93.8	101.1	521.3	550.4*
Côte d'Ivoire 2//Ivory Coast	132.2	110.3	104.6	105.5	109.3	121.0	126.7	117.3	105.1	123.1	100.0	109.9	92.1	272.8	...	...
Niger	100.0	75.0	175.0	91.7	91.7	100.0	108.0	125.0	166.7	200.0	100.0	...	...	...	...	...
Guinée/Guinea											100.0	103.5	104.8	107.0	161.8	300.1
Sierra Leone	70.5	68.9	58.0	78.4	89.5	95.1	92.1	100.2	104.2	112.6	100.0	99.2	118.8	200.3	186.3	190.3
Togo	...	109.9	106.9	97.9	98.3	115.0	157.4	120.2	104.0	111.2	100.0	106.7	114.2	115.4	541.0	581.6*
Nigéria	100.3	97.9	97.2	106.5	106.9	103.9	96.8	96.7	105.9	101.7	100.0					
Cameroun/Cameroon	74.7	74.7	74.2	74.7	75.0	76.4	76.1	76.9	94.5	104.9	100.0	101.9	100.0	100.1	107.0	118.2
Empire centrafricain/Central African Empire	70.6	52.1	56.9	95.6	101.4	96.1	59.4	98.1	102.0	115.1	100.0	43.9	89.7	105.9	128.2	128.2*
Gabon	78.0	82.0	110.4	95.8	100.0	...	100.6	106.6	95.8	103.2	100.0	130.9	143.9	158.7	544.8	523.4
Congo 3/	7.5	172.1	88.9	64.2	69.5	70.5	67.1	77.5	65.0	94.2	100.0	109.0	145.7	203.4	238.4	236.1
Zaïre						47.3	92.2	78.4	85.7	102.8	100.0	79.5	74.5	108.5	130.8	86.9
Rwanda											100.0	98.0	97.0	98.0	98.0	105.0
Angola	35.8	34.8	94.7	86.0	85.5	92.4	90.5	91.0	93.4	96.2	100.0	91.6 3/	90.2 3/	155.9 3/	338.5 3/	349.1 3/
Madagascar	31.7	35.0	34.4	34.4	32.8	37.0	122.3	116.1	97.0	89.5	100.0	96.5	101.5	100.7	129.1	198.8

Source : CEA à partir des publications nationales/
ECA from national publications

Notes :
1/ A partir de 1970 pétrole seulement/From 1970 crude petroleum only
2/ A partir de 1970 diamants seulements/From 1970 diamonds only
3/ Indice Paasche à partir de 1970/Paasche index from 1970

Tableau A : Valeurs moyennes des exportations et importations des pays africains (1960-1975) exprimées en monnaies nationales
Table A : Unit values of exports and imports for selected African countries (1960-1975) in terms of national currencies

X = Exportations/Exports M = Importations/Imports Indice 1970 = 100

		1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
AFRIQUE DU NORD																	
Maroc/Morocco	X	89	92	90	95	93	104	[illegible]	93	101	100	100	[illegible]	104	111	235	[illegible]
	M	90	93	91	93	102	115	[illegible]	97	90	98	100	105	113	128	170	[illegible]
Algérie/Algeria	X	92*	98*	100*	102*	100*	108*	106	/107	107	95	100	118/	130	155*	[illegible]	[illegible]
	M	77*	80*	82*	82*	84*	85*	85*	/81	97	96	100	106/	103	129*	173*	[illegible]
Tunisie/Tunisia	X	79	80	84	82	75	93	94	97	97	99	100	109	112	144	300	[illegible]
	M	78	77	79	81	80	105	113	100	98	96	100	111	107	127	17[illegible]	[illegible]
Libye/Libya	X	111*	111*	/103	100	99	91	98	95	101	99	100	130/	135*	174*	518*	[illegible]
	M	94*	95*	/95	101	97	101	100	100	104	106	100	104/	100*	111*	173*	[illegible]
Egypte/Egypt	X	66*	66*	74*	/81	87	92	90	95	101	-102-	100	100	101	117	207	[illegible]
	M	101*	101*	101*	/103	107	100	103	100	97	-99-	100	109	109	117	218	[illegible]
Soudan/Sudan	X	92	88	84	83	90	98	84	87	88	97	100	103	110	130	205	17[illegible]
	M	82	76	75	83	86	110	73	93	97	95	100	107	116	138	209	[illegible]
AFRIQUE DE L'OUEST																	
Mauritanie/Mauritania	X	97*	97*	90*	93*	92*	96*	95*	90*	88*	90*	100	104*	103*	110*	124*	[illegible]
	M	82*	82*	83*	92*	86*	102*	94*	94*	94*	97*	100	105*	114*	137*	175*	[illegible]
Sénégal	X	88	88	-88-	87	87	86	[illegible]	80	74	95	-100-	110	109	139	247	[illegible]
	M	82	82	-86-	87	91	91	[illegible]	87	97	99	-100-	111	118	142	215	[illegible]
Mali	X	78*	65*	83*	87*	90*	89*	87*	88*	88*	91*	100	95*	94*	99*	109*	[illegible]
	M	98*	97*	99*	99*	103*	104*	107*	97*	105*	99*	100	97*	104*	125*	159*	[illegible]
Côte d'Ivoire/Ivory Coast	X	66*	66*	66*	68*	74*	67*	71*	79*	[illegible]	99*	/100	93	92	119	160/	[illegible]
	M	79*	79*	86*	80*	90*	89*	96*	90*	100*	101	/100	105	111	123	170/	10[illegible]
Haute Volta/Upper Volta	X	55*	49*	50*	63*	75*	91*	93*	101*	100*	112*	100	105	115*	113*	123*	[illegible]
	M	73*	75*	76*	75*	83*	88*	85*	91*	100*	107*	100	1048	105*	115*	149*	157*
Bénin	X	64*	67*	/65	73	71	86	70	73	74	83	100	104/	105*	121*	154*	[illegible]
	M	92*	93*	/93	92	[illegible]	94	90	97	97	91	100	105*/	112*	130*	146*	175*
Niger	X	90*	88*	73*	102*	96*	98*	90*	82*	88*	95*	100	90*	118*	110*	174*	[illegible]
	M	88*	86*	86*	87*	89*	90*	92*	90*	91*	95*	100	105*	108*	121*	164*	17[illegible]
Cap Vert/Cape Verde	X							72	82	103	94	100	116	124	130	14[illegible]	[illegible]
	M	94*	94*	94*	96*	97*	98*	99*	101*	98*	101*	100	110*	116*	116*	150*	[illegible]
Gambie/Gambia	X	74	62	65	61	64	-75-	[illegible]	64	73	85	100	96	98	118*/	183*	[illegible]
	M	92	82	86	81	81	-82-	82	85	96	96	100	102	106	111*/	175*	[illegible]
Guinée Bissau/Guinea Bissau	X										115*	100	95*	81*	58*		
	M										101	100	110*	115*	145*		
Guinée/Guinea	X						86*	86*	86*	86*	93*	99*	101*	101*	101*	140*	214*
	M						91*	94*	94*	93*	100	94*	104*	115*			
Sierra Leone	X	78*	76*	75*	81*	80*	92*	88*	97*	102*	109*	100	100*	110*	155*	172*	15[illegible]
	M	97*	97*	99*	100*	/103	100	101	104	110	105	100/	10[illegible]*	118*	129*	203	[illegible]

Tableau 4 : Valeurs moyennes des exportations et importations des pays africains (1960-1975) exprimées en monnaies nationales (suite)
Table 4 : Unit values of exports and imports for selected African countries (1960-1975) expressed in national currencies (cont'd)

X = Exportations/Exports M = Importations/Imports Indice 1970 = 100

		1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
AFRIQUE DE L'OUEST (suite)/ WEST AFRICA (Cont'd)																	
Liberia	X	131*	111*	110*	111*	102*	/116	104	104	/100	109	100	111	105/	114*	156	[illegible]
	M	86*	86*	86*	87*	88*	90*	93	93	/93	106	100/	106	121/	168*	200*	[illegible]
Ghana	X	74	61	55	57	51	46	47	55	76	89	100/	83	102*	136*	206*	213*
	M	77	77	74	72	75	76	97	77	79	81	100/	91*	80*	116*	147*	173*
Togo	X	93	88	66	-53-	67	63	75	74	73	-73-	100	85	84/	101*	223*	[illegible]
	M	84	81	80	-92-	91	92	87	94	85	-104-	100	90	89/	115*	120*	[illegible]
Nigeria	X	101	94	90	94	95	91	95	94*	95*	98*	100	112*	129*	172*	454*	445*
	M	85*	86*	84*	88*	90*	93*	93*	93*	94*	94*	100	106*	114*	133*	154*	[illegible]
AFRIQUE DU CENTRE/C. AFRICA																	
Cameroun/Cameroon	X	74*	67*	65*	69*	74*	58*	58*	71*	83*	93*	100	94*	97*	122*	157*	175
	M	71*	71*	71*	78*	73*	82*	80*	85*/	94*	94*	100	102*	118*	128*	155*	[illegible]
Tchad/Chad	X	68*	75*	73*	75*	77*	78*	80*	94*	95*	92*	100	98*	103*	105*	106*	[illegible]
	M	74*	72*	71*	76*	78*	76*	81*	81*	82*	89*	100	102*	105*	121*	151*	
Empire centrafricain/ Central African Empire	X	80*	73*	71*	/80	95	90	94	91	91	97	100/	80*	103*	110*	137*	[illegible]
	M	78*	78*	78*	80*	82*	83*	86*	85*	84*	96	100	104*	95*	113*	144*	177*
Gabon	X	96*	102*	100*	97*	102*	104*	97*	84*	88*	97*	100	125*	130*	161*	391*	[illegible]
	M	91*	88*	86*	89*	89*	91*	94*	100*	101*	101*	100	109*	115*	125*	144*	[illegible]
Congo	X	80*	82*	/81	83	86	85	88	95	103	106	100	117*	130*	163*	339*	[illegible]
	M	87*	88*	/88*	88*	90*	92*	94*	97*	[illegible]	95*	100	105*	114*/	135*	179*	[illegible]
Guinée Equatoriale/ Equatorial Guinea	X											100	95*	93*	95*	129*	[illegible]
Sao Tomé & Principe	X	82*	60*	54*	67*	55*	50*	55*	81*	95*	108*	100	74*	75*	134*	202*	[illegible]
	M	94*	94*	94*	96*	97*	99*	99*	101*	90*	101*	100	110*	116*	145*	190*	[illegible]
Zaïre	X	9*	4*	6*	64*	/57	61	77	82	86	100	100	-82-	77	110	137	[illegible]
	M	15*	7*	9*	70*	/57*	86	97	86	86	89	100	-92-	108	130	150	[illegible]
Ruanda	X	39*	42*	38*	43*	50*	54*	74*	71*	/73*	83*	100	83*	84*	91*/	112	107*
	M	55*	57*	54*	59*	56*	60*	87*	77*	/73	88	100	113	110	100/	143*	[illegible]
Burundi	X	63*	76*	63*	76*	61*	80*	77*	74*	72*	95*	100	79*	88*	101*	103*	
	M	76*	83*	80*	84*	89*	81*	93*	92*	93*	95*	100	103*	113*	124*	157*	177*
Angola	X	68*	65*	68*	79*	88*	82*	82*	70*	90*	90*	100	99*	108*	142*	253*	[illegible]
	M	91*	91*	91*	93*	94*	96*	96*	98*	98*	99*	100	104*	102*	114*	158*	[illegible]

Tableau [illegible] Valeurs moyennes des exportations et importations des pays africains (1960-1975) exprimées en monnaies nationales (suite)
Table [illegible] Unit values of exports and imports for selected African countries (1960-1975) expressed in national currencies (cont'd)

X = Exportations/Exports M = Importations/Imports Indices 1970 = 100

		1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
AFRIQUE DE L'EST/EAST AFRICA																	
Botswana	X	86*	88*	88*	89*	92*	97*	99*	100*	100*	100*	100	111*	137*	178*		
	M	70*	79*	81*	82*	83*	90*	91*	91*	92*	96*	100	105*	113*	128*		
Lesotho	X	76*	78*	76*	84*	82*	85*	87*	91*	94*	96*	100	105*	111*	117*		
	M	77*	78*	75*	80*	82*	85*	88*	91*	94*	96*	100	105*	111*	118*		
Swaziland	X	82*	83*	84*	85*	87*	90*	94*	97*	93*	98*	100	101*	122*	120*	140*	
	M	77*	78*	79*	81*	82*	85*	88*	92*	94*	97*	100	101*	108*	117*		
Zambie/Zambia	X	59*	53*	53*	54*	/59	98	105	94	110	110	100	76	77	114	132	[illegible]
	M	60*	71*	71*	73*	/80	84	87	89	94	92	100	105	111	125	163	155
Rhodésie du Sud/Southern Rhodesia	X	91*	87*	86*	88*	90*	/112	92	89	91	96	100	101	100	108	142	15[illegible]
	M	72*	74*	74*	75*	84	/87	92	95	94	95	100	107	104	109	148	1[illegible]
Malawi	X	75*	53*	58*	77*	/84	86	85	81	87	94	100	109	105	112	147	173
	M	73*	80*	80*	83*	90*	90*	92*	/93	99	101	100	109	111	130	175	[illegible]
Mozambique	X	85*	85*	88*	88*	89*	93*	93*	91*	98*	98	100	104*	112*	122*	132*	[illegible]
	M	94*	94*	94*	96*	97*	99*	99*	101*	98*	101*	100	110*	115*	145*	190*	211*
Madagascar	X	80*	71*	/71	74	75	73	72	-75-	74	79	100/	102*	107*	117*	115*	[illegible]
	M	73*	71*	/81	80	82	83	85	-87-	88	91	100/	104*	108*	128*	171*	227*
Iles Comores	X	120*	97*	99*	101*	90*	95*	90*	89*	90*	98*	100	105*	103*	98*	149*	[illegible]
	M									89*	103*	100	95*	98*	119*	171*	1[illegible]
Réunion	X	92*	88*	88*	105*	97*	90*	97*	93*	93*	96*	100	100*	113*	137*	253*	[illegible]
	M	89*	90	90*	92*	93*	94*	95*	96*	95*	95*	100	102*	116*	144*	188*	[illegible]
Maurice/Mauritius	X	99	92	93	-119-	103	-87-	91	94*	92	94	100	109	129	151	370	[illegible]
	M	79	79	78	-80-	81	-85-	85	87*	100	101	100	110	120	155	254	[illegible]
Burundi	X	101	98	99	114	-115-	101	101	100	99	99	100	101	111	141	179*	[illegible]
	M	87	84	79	87	-95-	90	99	105	98	101	100	105	131	159	229*	[illegible]
Ouganda/Uganda	X	78	79	76	83	-95-	87	89	86	90	87	100	105	102	121	137	[illegible]
	M	84	83	79	93	-89-	91	90	94	90	93	100	107	123	143	204	271
Kenya	X	99	95	93	96	-97-	96	97	96	90	89	100	96	107	121	154	[illegible]
	M	92	85	88	93	-93-	95	90	95	96	98	100	109	121	140	22[illegible]	[illegible]
Somalie/Somalia	X	100*	104*	106*	110*	100*	107*	105*	102*	110*	103*	100	108*	115*	157*	105*	[illegible]
	M	89*	89*	89*	91*	93*	94*	94*	95*	95*	95*	100	108*	115*	144*	194*	[illegible]
République de Djibouti/Republic of Djibouti	M											100	100*	103*	140*	123*	[illegible]
												100	109*	117*	144*	188*	157*
Ethiopie/Ethiopia	X	74*	72*	80	/85	85	86	86	77	80	80	100	89	94	108	115	[illegible]
	M	80*	88	89	/90	90	91	94	96	96	99	100	105	102	114	135	13[illegible]
Afrique du Sud/South Africa	X	89	90	85	91	95	97	100	97	97	100	100	98	107	129	150	14[illegible]
	M	90	89	90	91	92	96	100	100	96	99	100	107	121	139	162	187

Sources : CEA à partir des publications nationales et internationales/ ECA from national and international publications.

Signes conventionnels : / Série enchaînée à la précédente/ Series linked to former ones.
Conventional signs : * Estimation / Estimated.